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Homeland Security

United States
Coast Guard

Coast Guard Handbook Of Acquisition Logistics And Templates

COMDTINST M4105.13
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United States Coast Guard

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U.S. Coast Guard

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Subj. COAST GUARD HANDBOOK OF ACQUISITION LOGISTICS AND TEMPLATES (CG HALT)

Ref: (a) Major System Acquisition Manual (MSAM), COMDTINST M5000.10 (series)
(b) Non-Major Acquisition Process (NMAP), COMDTINST 5000.11 (series)
(c) Systems Integrated Logistics Support (SILS) Policy Manual, COMDTINST M4105.8 (series)
(d) Logistics Element Manager's (LEM) Desk Guide, COMDTINST M4105.11 (series)
(e) Privacy Act of 1974, 5 U.S.C. § 552a
(f) Equipment/System Integrated Logistics Support Plan and Equipment support Sheet (ESS) Development and Maintenance Responsibilities, COMDTINST 4105.7 (series)
(g) DHS Instruction/guidebook #102-01-001
(h) CG-1 Technical Authority, COMDTINST 4700.5 (series)
(i) U.S. Coast Guard Competency Management System Manual, COMDTINST M5300.2 (series)
(j) Operation of the Defense Acquisition System, DoDI 5000.2
(k) Property Management Manual, COMDTINST M4500.5 (series)
(l) Foreign Transfers of Excess Coast Guard Vessels, COMDTINST M4570.1 (series)

1. PURPOSE. This is a new directive that establishes procedures and provides guidance for major and non-major systems acquisition projects. This directive has been organized to apply a uniform approach to acquisition logistics planning and project management for contractual logistics requirements.

2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Manual. Internet release is authorized.

DISTRIBUTION – SDL No. 156

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NON-STANDARD DISTRIBUTION.

3. DIRECTIVES AFFECTED. None.

4. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATION. Environmental considerations were examined in the development of this directive and have been determined to be not applicable.

5. WAIVERS. The proponent for this directive is the Logistics Program Management and Policy Division, Commandant (CG-441). The Technical Authorities have the responsibility to review and approve exceptions to this Manual that are consistent with controlling laws and regulations. Requests shall contain sufficient detail to clearly explain the basis of the request, procedures to be waived, and the recommended alternative action. Copies of waiver requests and disposition by the Technical Authority shall be sent to Commandant (CG-441).

6. SUGGESTED IMPROVEMENTS. This Manual is under continual review and will be updated as necessary. Users may send comments and suggested improvements via electronic mail to margo.j.thompson@uscg.mil.

7. FORMS/REPORTS. Forms in this Manual are used to identify and establish appropriate logistics data requirements in the format of a DD1423, Contract Data Requirements List. Contract Data Requirements List will be tailored appropriately for Major and Non-Major Acquisition Projects. The logistics templates are provided in Appendix A of this directive.

   The forms referenced in this Manual are available in USCG Electronic Forms on the Standard Workstation or on the Internet: http://www.uscg.mil/forms/; CGPortal at https://cgportal.uscg.mil/delivery/Satellite/uscg/References and Intranet at http://cgweb.comdt.uscg.mil/CGForms.

T. P. OSTEBO /s/
Rear Admiral, U. S. Coast Guard
Assistant Commandant for Engineering and Logistics

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EXECUTIVE SUMMARY

The Handbook of Acquisition Logistics and Templates (HALT) describes mission support planning for new Coast Guard (CG) Systems (e.g., aircraft, cutter, boat, and Command, Control, Communications, Computer and Information Technology (C4&IT) systems.

a. The HALT identifies the mission support information, equipment, and services the CG must obtain during an acquisition project.

b. The HALT links mission support planning to crew safety, mission performance, and managing lifecycle costs.

c. The HALT uses a theme of teamwork and collaboration. It stresses the importance of CG organizations working together to support new systems that enter the field.

d. The HALT outlines how the CG integrates Commandant (CG-1), Commandant (CG-4), and Commandant (CG-6) Technical Authorities into Commandant (CG-9) Major Systems Acquisition and Non-Major Acquisition Processes.

How does the HALT integrate the Commandant (CG-1), Commandant (CG-4), and Commandant (CG-6) Technical Authorities into Commandant (CG-9) acquisition processes?

a. It provides an overview of the Major Systems Acquisition and Non-Major Acquisition Processes. It identifies the key personnel and organizations who execute the processes. It discusses process phases and decision points. It describes who is responsible for funding mission support planning and who is responsible for assessing and approving mission support plans for sufficiency.

b. It discusses the ten logistics elements managed by the CG Technical Authorities. It identifies the mission support planning required for each logistics element by acquisition phase.

c. It discusses special mission support considerations such as configuration management, post-production support, initial fielding, and system disposal.

The HALT provides the following tools:

a. A checklist that identifies mission support activities performed during a Major System Acquisition. The HALT organizes the checklist by acquisition process phase.

b. A checklist that identifies the mission support activities performed during a Non-Major Acquisition.

c. An overview of the Contract Data Requirements Lists (CDRLs) mission support personnel can use to obtain information from contractors.

d. A guide designed to assist CG teams responsible for planning and establishing support systems for CG assets in developing information for preparing Statements of Work and CDRLs.

Chapter 1 - General

A. Purpose. This handbook provides guidance on creating mission support (e.g., training, maintenance planning) for new CG systems (e.g., aircraft, boat, ship and C4&IT Systems). Fully functioning mission support must be in place when the CG fields a new system. The system will require trained staff, supplies, facilities (FAC), and information technology support to successfully perform its mission, operate safely, and minimize its lifecycle costs (LCCs).

1. This handbook is designed for CG teams responsible for planning and establishing mission support for CG systems procured through the Major Systems Acquisition and Non-Major Acquisition Processes (NMAP) and System Development Life Cycle (SDLC) process. The team members, representatives from Commandant (CG-9) and multiple mission support organizations (e.g., Commandant (CG-1), Commandant (CG-4), Commandant (CG-6), Logistics and Service Centers), must work together to create the systems' mission support.

2. The handbook provides a guide for integrating mission support technical authorities in Commandant (CG-1) Human System Integration; Commandant (CG-4) System Design, Construction, and Maintenance; Commandant (CG-6) Command, Control, Communications, Computers, and Information Technology and System Development Life Cycle; and Commandant (CG-8) Financial Management into acquisition processes executed by Commandant (CG-9) Acquisitions. It integrates the technical authorities by identifying the critical mission support activities that must be performed during major systems and non-major system acquisitions.

3. The handbook identifies the information, goods, and services the team must obtain or put in place during the acquisition stage of a system's lifecycle, to establish the mission support that sustains the system through the remainder of its life. Although this handbook focuses on the acquisition stage of a system's lifecycle, decisions made during the acquisition stage will have major impact upon the system during its operations and sustainment, and disposal stages. Figure 1-1 depicts the three stages of a system's lifecycle–acquisition, operations and sustainment, and disposal. The team that establishes the system's mission support must design the mission support so it will be capable of supporting the system throughout its life.

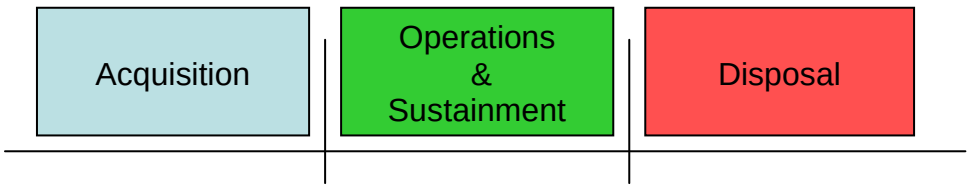


Figure 1-1. Three Stages of a Coast Guard System's Lifecycle

4. Every acquisition project and system is unique, so each team tasked with establishing a new system's mission support must tailor the guidance in this handbook to their specific project and system.

B. How to use the Handbook

1. Chapter 2 provides an overview of the CG Major Systems Acquisition process, the NMAP and the SDLC process. The chapter summarizes these processes for readers who only need exposure to key acquisition activities. Readers who require a detailed understanding of these processes should consult policy and procedures documents issued by Commandant (CG-9) or Commandant (CG-6). Reference (a) sets the policy for major system acquisitions. Reference (b) prescribes non-major acquisition requirements. The Command, Control, Communications, Computers and Information Technology (C4&IT) System Development Life Cycle (SDLC) COMDTINST M5230.66 (series) prescribes requirements for non-major C4&IT system acquisition projects exempt from NMAP.
2. Chapters 3, 4 and 5 summarize the mission support planning required for new systems. Chapter 3 provides an overview of key mission support planning concepts. Chapters 4 and 5 provide information on logistics elements. For in-depth discussions of specific mission support topics the reader should refer to policy guidance issued by the CG Technical Authorities which are Commandant (CG-1), CG-1 Technical Authority, COMDTINST 4700.5 (series); Commandant (CG-4), CG-4 Technical Authority, COMDTINST 4700.4 (series); Commandant (CG-6), CG Technical Authority, COMDTINST 5230.79 (series); and Commandant (CG-8), Chief Financial Officer (CFO) Technical Authority, COMDTINST 5402.3 (series). References (c) and (d) provides guidance on planning mission support for new CG systems. Reference (e) provides guidance on privacy issues during mission support planning. The Command, Control, Communications, Computers and Information Technology (C4&IT) System Development Life Cycle (SDLC), COMDTINST M5230.66 (series) provides policy and guidance for non-major C4&IT system acquisition projects exempt from NMAP.
3. Chapter 6 provides background on how other logistics considerations such as configuration management are addressed during the acquisition process.
4. Chapter 7 is an overview of how systems are transitioned into the operational environment and how post production issues are addressed.
5. Chapter 8 provides information on how to access a library of CDRL and Data Item Descriptions (DID) that can be used in contracts to obtain information and analyses needed to plan mission support.
6. Appendix A integrates the CG Major Systems Acquisition Process with mission support by matching critical mission support events and activities to the major system acquisition project phase in which they normally occur. Figure 1-2 shows the five phases of the Major Systems Acquisition Process.

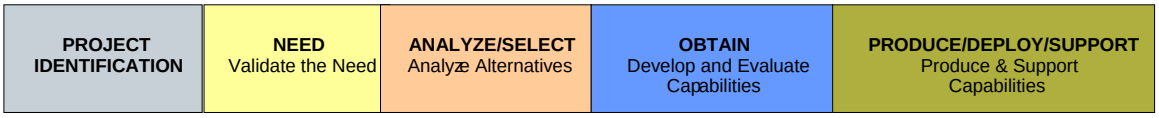


Figure 1-2. The Five Phases of the Coast Guard Major Systems Acquisition Process

The first four phases of the CG Major Systems Acquisition Process occur during the acquisition stage of the system's lifecycle. The final CG Major Systems Acquisition Process Phase, Acquisition/Deploy/Support, occurs in both the acquisition, and

operations and sustainment stages of the system's lifecycle. CG Major System Acquisition Process activities such as contract warranty administration occur after systems are in the field and operational. Figure 1-3 depicts the relationship between the phases of the CG Major Systems Acquisition Process and the three stages of a system's lifecycle.

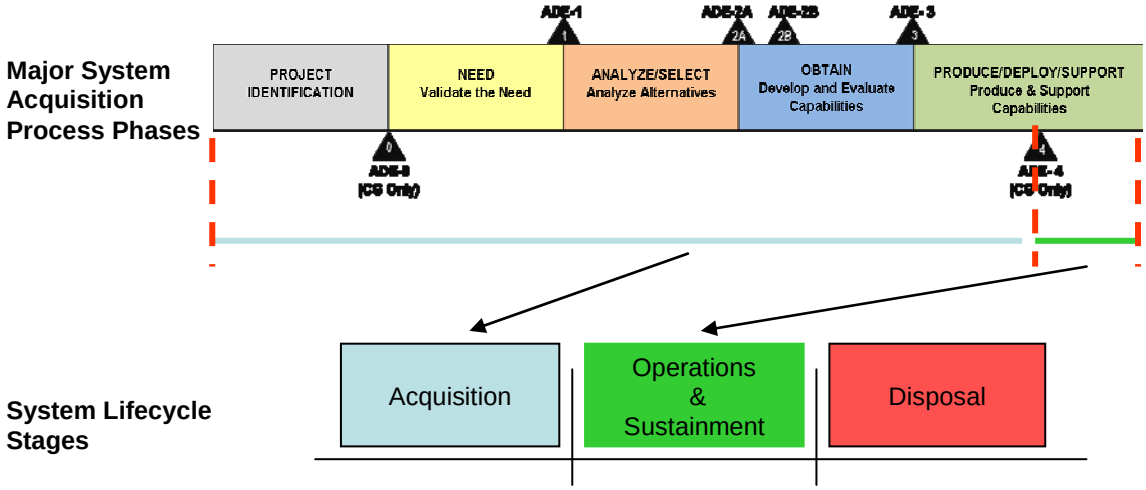


Figure 1-3. Coast Guard Major Systems Acquisition Process Phases Relation to System Lifecycle Stages

7. Appendix B integrates the CG NMAP with mission support by matching critical mission support events and activities to the non-major acquisition project phase in which they normally occur. Figure 1-3 identifies the three NMAP phases.

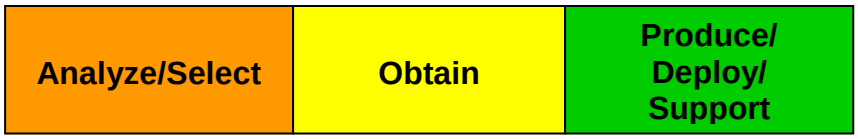


Figure 1-4. The Three Phases of the Coast Guard NMAP

8. Appendix C is a guide designed to assist CG teams responsible for planning and establishing support systems for CG assets in developing information for preparing Statement of Work (SOW) and CDRL.
9. Appendix D provides a description of all of the available SOW language and CDRL templates in Appendix E.
10. Appendix E contains sample SOW language and sample CDRLs.
11. Appendix F is a listing of the DIDs used in Appendix E but note that DIDs are frequently being updated.
12. Appendix G is a list of acronyms related to acquisition mission support.

Chapter 2 - Acquisition Process Overview

A. Overview of CG Acquisition and Procurement Processes

The CG utilizes a variety of processes to acquire systems and procure supplies, services, and construction. The process the CG uses depends upon what is being procured and its dollar value. DHS Acquisition Directive (AD) 102-01 (series) issues consolidated DHS-wide acquisition management policy. DHS AD 102-01 applies to all acquisitions. The MSAM provides DHS AD 102-01 implementation guidance for CG major acquisitions. All C4&IT major acquisitions should follow MSAM. The NMAP provides DHS AD 102-01 implementation guidance for CG non-major acquisitions, excluding C4&IT. The NMAP directs non-major C4&IT acquisitions to follow SDLC. All CG C4&IT acquisitions not following MSAM should follow the SDLC policy. Virtually all CG systems requiring formal mission support planning are procured using the CG Major Systems Acquisition Process, the CG NMAP or the SDLC.

B. CG Major Systems Acquisition Process

The Major Systems Acquisition Process is used for systems whose lifecycle costs exceed $300M. Reference (a) provides detailed guidance on the Major Systems Acquisition Process. At a minimum, personnel who plan mission support for systems acquired by the Major Systems Acquisition Process must be familiar with the following major system acquisition topics and concepts.

1. Key Acquisition Personnel and Organizations. Major system acquisition projects use numerous CG organizations and personnel to execute the Major Systems Acquisition Process. People who plan mission support for new systems should be aware of the following key positions and organizations.

   a. Coast Guard Acquisition Executive (CGAE). The Vice-Commandant is the CGAE and is responsible to oversee all CG Major Systems Acquisitions.

   b. Coast Guard Acquisition Review Board (CGARB). The CGARB is the primary acquisition advisor to the CGAE and is kept apprised of a major acquisitions' progress through a series of annual reviews. The primary function of the CGARB is to review major acquisitions at each Acquisition Decision Event (ADE) (key points in the Major System Acquisition Process). CGARB reviews ensure CG top management's commitment to the acquisition strategy and project plans. The CGARB also serves as a forum to discuss project issues and resolve problems that need to be addressed by CG top management.

      The CGARB:

      (1) Analyzes project cost, schedule, and technical progress, accomplishments, and future plans to determine if the project is prepared to go forward for CGAE approval;

      (2) Reviews project decision documents and select planning documentation prior to submission to the CGAE and/or the Chief of Staff (future Deputy Commandant for Mission Support (DCMS)); and

(3) Provides the CGAE an approval or disapproval recommendation for all key decisions.

The CGARB consists of the members shown in Table 2-1. CGARB Membership. CGARB membership includes all participants necessary to comply with review requirements prescribed by legislation and regulation.

CGARB Membership				
	VCG (CAE)			
CG-01	CG-1	CG-2	CG-4	DCO
CG-5	CG-6	CG-7	CG-8	
CG-9	CG-91	CG-93	CG-094	

Table 2-1

c. CG Acquisition Directorate (CG-9). Commandant (CG-9) provides a single point of management for all CG major system acquisitions.

d. Project Manager (PM). The PM is the chartered individual who has responsibility and authority to accomplish project objectives for developing, producing, and deploying a new system with initial mission support to meet identified operational requirements. The PM is accountable for meeting established cost, schedule, and performance parameters established by the Acquisition Decision Authority (ADA), and works under the guidance and supervision of the Program Executive Officer (PEO).

To fulfill this role, the PM is empowered to manage cost, schedule, and performance of the acquisition and is thereby the program management authority accountable to the acquisition chain of command for meeting overall business and technical goals of their specific acquisition project. The PM is the single point of contact and single point of authority responsible for providing the strategic direction necessary for managing the system through the acquisition process of design, development, production, and deployment.

The PM is the key individual for acquisition program execution. PMs are accountable for the successful execution of their projects. PMs' span of control is such that they must be autonomous, trained, resourced, empowered, and accountable to senior management for the effort. This all encompassing level of authority and responsibility is the foundation for the CG's PM-centric acquisition execution model.

e. Program Manager. Program Managers are responsible for directing/managing a group or portfolio of related projects.

f. Program Executive Officer (Director of Acquisition Programs). The PEO has overarching responsibility for acquisition project management and execution. This includes the oversight of all CG major acquisition projects to modernize, recapitalize and sustain surface, air, C4&IT and logistics systems for the CG's multiple maritime

missions. This portfolio of projects is grouped into three major domains (air, surface and C4&IT); each led by a Program Manager who reports directly to the Deputy PEO and PEO. PMs remain responsible to the PEO through their respective Program Managers for the cost, schedule and contract performance of their projects. The PEO also oversees acquisition logistics, which is planned at the project level by using a matrix of support organizations.

g. Integrated Logistics Support (ILS) Manager. The ILS Manager is responsible to formulate, coordinate, and implement the project ILS program. The ILS Manager coordinates with the project manager for budget planning and coordination, and for compliance with Commandant (CG-1, CG-4, and CG-6) guidance and policy. The ILS Manager is responsible to draft the Integrated Logistics Support Plan (ILSP) and to manage data received from analysis completed in accordance with (IAW) the plan. The ILS Manager chairs the Integrated Logistics Support Management Team (ILSMT).

h. Integrated Logistics Support Management Team. The ILSMT is responsible for logistics support planning. The ILSMT is established during the Analyze/Select phase. It consists of members representing various logistics support elements at Headquarters and the Logistics Centers. It often includes the Sponsor's Representative, other interested organizations, and contractor representatives, as appropriate for the project. Technical Authority representatives from Commandant (CG-6), Commandant (CG-4), and Commandant (CG-1) are always part of the ILSMT.

i. Contracting Officer (KO). The KO has a unique role and responsibility in supporting project execution. The KO:

(1) Is the sole Government person with the authority to enter into, administer, or terminate contracts and make related determinations and findings.

(2) Ensures performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interest of the United States in its contractual relationships.

(3) Ensures all requirements of law, executive orders, directives, regulations, and all other applicable procedures, including clearances and approvals, and ethics have been met.

(4) Ensures sufficient funds are available for obligation.

(5) Ensures contractors receive impartial, fair, and equitable treatment.

(6) Requests and considers the advice of subject matter experts (SMEs) in audit, law, engineering, information security, transportation, and other fields, as appropriate

j. Project Resident Office (PRO). A PRO's primary responsibility is verifying that a contractor complies with the contract's technical requirements. PROs are usually located on or near the contractor's facility.

k. Coast Guard Technical Authorities. The Commandant has designated Technical Authorities to serve as the CG's authoritative experts in providing the authority,

responsibility, and accountability to establish, monitor, and approve technical standards, tools, and processes, in conformance with policy, requirements, architectures, and standards.

l. Assistant Commandant for Human Resources Directorate (CG-1). Commandant (CG-1) is designated as the technical authority pertaining to Human Systems Integration (HSI), to include manpower, personnel, training, human factors engineering, occupational health and safety, habitability, and personnel survivability, for the design, construction, support and sustainment of CG systems and assets.

m. Assistant Commandant for Engineering and Logistics (CG-4). Commandant (CG-4) is designated as the Technical Authority for the design, construction, and maintenance, logistics support, and configuration management of CG Systems excluding CG C4&IT systems.

n. Assistant Commandant for Command, Control, Communications, Computers, and Information Technology Systems (CG-6). Commandant (CG-6) is designated as the Technical Authority for the design, development, deployment, security, protection, and maintenance, and configuration management of all CG C4&IT systems.

o. Assistant Commandant for Resources (CG-8). Commandant (CG-8) is designated as the Technical Authority for financial management to include financial planning and programming, budget formulation and execution, financial and accounting policy and operations, internal and external financial reporting, and financial systems requirements.

2. Coast Guard Major Systems Acquisition Phases. CG Major System Projects are executed in five distinct phases.

a. Project Identification Phase. Before a major systems acquisition formally begins, a capability gap must be identified. CG Mission Analyses and Operational Analyses are performed by Assistant Commandant for Policy and Plans (CG-5) and the operating program Sponsor during this phase to identify CG capability gaps. These analyses must include integration with CG Technical Authorities Commandant (CG-1), Commandant (CG-4), Commandant (CG-6) and Commandant (CG-7) to ensure mission support needs as well as mission capabilities are addressed. The evaluation by technical authorities of doctrine, organization, training, material, leadership and education, personnel, and facilities (DOTMLPF) assists in determining whether a material solution is needed to resolve the capability gap(s). The result of this ongoing mission analysis is a Mission Analysis Report (MAR).

b. Need Phase. During the Need Phase, the ongoing mission analyses are completed. The resulting Concept of Operations (CONOPs) and Mission Need Statement (MNS) describe specific functional capabilities required to address the capability gaps in CG mission performance. In addition, initial project management documentation, including the Capability Development Plan, an initial Acquisition Plan and a preliminary OMB Exhibit-300 business case (if applicable), are developed.

c. Analyze/Select Phase. The Analyze/Select Phase identifies and explores alternative ways to fill validated user mission capability gaps described in the MNS. A CONOP is prepared to identify and develop alternatives. Feasible alternatives are evaluated

(Alternatives Analysis) and system requirements are identified (Operational Requirements Document) to jointly provide a basis for assessing the relative merits (e.g., advantages and disadvantages, degree of risk, life-cycle cost, and cost-benefit) of the alternatives and ultimately determine a preferred solution. A Life Cycle Cost Estimate (LCCE) is prepared for the selected alternative. Mission support planning (ILSP) is performed for the preferred solution culminating in the initial definition of the project's performance, schedule, cost baseline (Acquisition Program Baseline) and test planning.

d. Obtain Phase. The Obtain Phase focuses on demonstrating the preferred alternative's feasibility and refining the solution prior to a full production commitment. During this phase, project test plans are implemented, essential systems engineering activities are performed, and integrated mission support is accomplished and refined as the project design evolves. If appropriate, a Low Rate Initial Production (LRIP) decision is made at ADE-2B, with overall project approval to proceed into production, deployment and support occurring at ADE-3.

e. Produce/Deploy/Support Phase. The Produce/Deploy/Support Phase objective is to produce and deploy discrete segments of operational capability with established mission support. Steady state support of the delivered capability occurs after the acquisition project has transitioned full support to the sustainment community. During the capability's operational life, the operating program continues operational analysis to ensure the system is meeting performance, supportability, and cost goals.

3. CG Major Systems ADEs. CG major system acquisition projects proceed from one phase to the next based upon approval at an ADE. ADEs come at the end of the specified phases of the acquisition process and mark the logical completion of the phase and the beginning of the next phase in the acquisition development cycle. The specific ADEs used by the CG include.

a. ADE-0 Project Identification. Authorizes a prospective project to enter the Need Phase. It is intended to provide a budgetary decision that supports funding a new-start project. Because of the budget process, it is the only ADE that is calendar driven instead of event driven.

b. ADE-1 Validate the Need. Validates the need for a major acquisition project and initiates the Analyze/Select Phase. ADE-1 ensures the project need (requirement) aligns with CG and Department of Homeland Security (DHS) strategic direction and ensures the project is adequately planned and resourced for upcoming phases.

c. ADE-2A Approve the Major Acquisition Project. Approves the alternative to be pursued, the APB (project's critical cost, schedule, and performance parameters), and for the project to enter the Obtain Phase. It is also where the LRIP quantity is approved if LRIP is planned by the project.

d. ADE-2B Approve the Acquisition Types. Approves the structuring of a project into a series of discrete segments for incremental implementation (e.g., Initial Operating Capability (IOC) discrete segment followed by a Full Operating Capability (FOC) discrete segment) as well as approval to commence production of first article or LRIP. Projects not planning discrete segments or first article/LRIP units, can conduct

a combined ADE-2A and ADE-2B review. ADE-2B occurs after the project's Critical Design Review (CDR) to ensure risks are appropriately adjudicated prior to LRIP.

e. ADE-3 Approve Production. Authorizes a project to enter the Produce/Deploy/Support Phase. Authorization is based upon successful test reports, production readiness, satisfactory sustainment reviews, and verification that the project will have sufficient production and operational resources (staffing and funding).

f. ADE-4 Project Transition. Authorizes the project to move into sustainment and is then managed by the Support Program Manager. It is a CG unique milestone (MS).

Figure 2- shows the relationship between Major Systems Acquisition Phases and the ADEs.

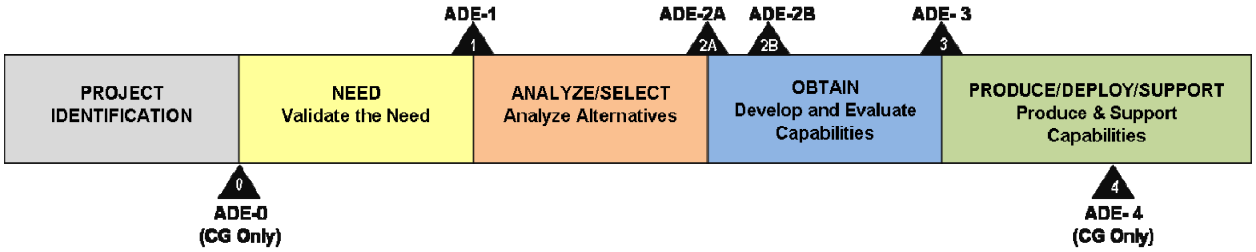


Figure 2-1. Five Phases of a Coast Guard Major Systems Acquisition Project and Associated ADEs

4. Project funding responsibility. The responsibility to resource (fund and staff) new systems during the Major Systems Acquisition Process changes as the project moves between phases. The Project Sponsor is initially responsible to prepare project resource documents, and the PM assumes responsibility during the Obtain Phase. Project Sponsors and PMs must reach out to mission support organizations when preparing resource documents to ensure all mission support requirements are identified, the associated costs are accurately estimated, and all mission support requirements are addressed by Resource Proposals. When preparing resource documents, Project Sponsors and PMs must ensure mission support organizations have the resources needed to plan how the system will be supported in addition to having the resources required to support the system when it is in the field. The following paragraphs summarize Major Systems Acquisition Process resource related responsibilities by Acquisition Process Phase.

a. Identification Phase. The Project Sponsor prepares an initial affordability analysis.

b. Need Phase. The Project Sponsor prepares the initial OMB 300 and a Resource Proposal for initial project funding and staffing. The Project Sponsor also ensures the project is included in the Capital Investment Plan.

c. Analysis/Select Phase. The PM develops a life cycle cost estimate.

d. Obtain Phase. The Project Sponsor develops the requirements for mission support resources and develops an associated mission support resource proposal. The PM updates the project life cycle cost estimate. The PM also prepares a resource

proposal, an updated OMB 300, and other necessary budget documents needed to support the project as a line item in a CG budget request.

e. Produce/Support/Deploy Phase. The Project Sponsor develops the requirements for mission support resources and develops the associated mission support resource proposal. The PM assists and supports the development of the mission support resource proposal. The PM updates operating expense funding for system operation and maintenance when responsibility for sustaining the new system is transferred to mission support organizations.

C. Non-Major Acquisition Process (NMAP)

1. The NMAP is used to procure systems other than facilities, and C4&IT. The process is designed for procurements having an estimated life cycle cost less than $300M that possess specific attributes that warrant disciplined project management and structured oversight. The attributes include:

   a. The investment is Acquisition, Construction and Improvement (AC&I) funded.

   b. The investment includes most of the elements associated with being an acquisition activity instead of a procurement (i.e., conceptualization, initiation, design, development, test, contracting, production, deployment, logistics support, modification, and disposal of a system).

   c. There is a safety concern associated with the investment in either the development or use of the system being procured.

   d. The investment is procuring a complex system that requires significant systems integration, has high risk, or requires high performance parameters that are essential for CG mission execution.

   e. There is a significant logistics or personnel impact resulting from the investment.

2. Personnel who plan mission support for systems acquired by the NMAP must be familiar with the following topics.

   a. Key Acquisition Personnel and Organizations. NMAP can involve numerous CG organizations and personnel to execute the NMAPs. The following are key positions and organizations that people planning mission support for new systems must to be aware of:

      (1) CGAE. The Vice-Commandant is the CGAE and is responsible to oversee all CG Non-Major Acquisitions. The CGAE designates select procurements as Non-Major Acquisitions and is the acquisition authority for ADE 1 (authorizes the project to proceed with the first phase of the NMAP).

      (2) Non-Major Acquisition Review Board (NM ARB). The NM ARB is chaired by Commandant (CG-924) and includes representatives from Commandant (CG-1), Commandant (CG-4), Commandant (CG-6), Commandant (CG-7), Commandant (CG-8), Commandant (CG-094) and Commandant (CG-9). The NM ARB identifies procurements that are candidates for designation as Non-Major Acquisition Projects and provides their recommendation to the CGAE.

The NM ARB also gives Commandant (CG-924) feedback and recommendations on the NMAP.

Organizations with Representatives on the CG NM ARB	
CG-1	CG-4
CG-6	CG-7
CG-8	CG-9
CG-924	CG-094

Table 2-2

(3) Commandant (CG-9) signs the project manager charters for Non-Major Acquisition Projects and is the ADA for ADE 2 and ADE 3. Commandant (CG-9) also approves several key plans–Project Plan, APB, and ILSP.

(4) Commandant (CG-924) serves as the CGAE's Executive Secretary for Non-Major Acquisitions, chairs the NM ARB, and provides assistance to the PM and project sponsor as needed.

(5) Project Manager. The PM is responsible to manage the project IAW the requirements outlined in NMAP and obtain approval for project documents and ADEs.

(6) Sponsor's Representative. The Sponsor's Representative drafts the requirements document, prepares the Operational Test Plan, and conducts the operational test and evaluation.

(7) Coast Guard Technical Authorities. The Commandant has designated Technical Authorities to serve as the CG's authoritative experts in providing the authority, responsibility, and accountability to establish, monitor, and approve technical standards, tools, and processes, in conformance with policy, requirements, architectures, and standards.

(8) Commandant (CG-1) is designated as the technical authority pertaining to HSI, to include manpower, personnel, training, human factors engineering, systems safety, habitability, and personnel survivability, for the design, construction, support and sustainment of CG systems and assets.

(9) Commandant (CG-4) is designated as the Technical Authority for the design, construction, and maintenance, logistics support, and configuration management of CG systems, excluding CG C4&IT systems.

(10) Commandant (CG-6) is designated as the Technical Authority for the design, development, deployment, security, protection, maintenance, and configuration management of all CG C4&IT systems.

(11) Commandant (CG-8) is designated as the Technical Authority for financial management to include financial planning and programming, budget formulation and execution, financial and accounting policy and operations, internal and external financial reporting, and financial systems requirements.

b. Non-Major Acquisition Process Phases. Non-Major Acquisition projects are executed in three phases.

(1) Analyze/Select Phase. The Analyze/Select Phase activities develop an approved requirements document and position the project for successful execution. The Project Plan, Acquisition Strategy, Acquisition Project Baseline, CONOPs, Alternative Analysis, LCCE, and initial mission support plans (e.g., ILSP and HSI) are developed in this phase.

(2) Obtain Phase. The Obtain Phase objectives are to acquire and test a system first article prior to deployment and fielding, and to ensure mission support is ready for implementation at the end of the phase. Key activities include establishing a contract administration organization, conducting design reviews, planning and conducting tests and evaluation, designing the mission support system, and preparing a resource proposal for sustainment.

(3) Produce/Deploy/Support Phase. The Produce/Deploy/Support Phase delivers, fields, and supports production systems. During this phase a production contract is executed, product configuration is managed, mission support resources are put in place, and responsibility for mission support is transferred to the applicable Technical Authorities.

c. NMAP Acquisition Decision Events. The NMAP has three ADEs. Each ADE is related to the movement of a project into the next phase of the NMAP.

(1) ADE- 1. ADE-1 occurs when the CGAE designates a procurement as a Non-Major Acquisition project.

(2) ADE-2. Commandant (CG-9) approves ADE 2. This ADE approves a project alternative and authorizes the project to acquire an initial system (first article) for testing.

(3) ADE-3. Commandant (CG-9) approves ADE 3. The ADE authorizes full production, deployment, and fielding of a system.

Figure 2-. Coast Guard Non-Major ADEs and Phases, depicts the relationship between NMAP Decision Events and Non-Major Acquisition Project phases.

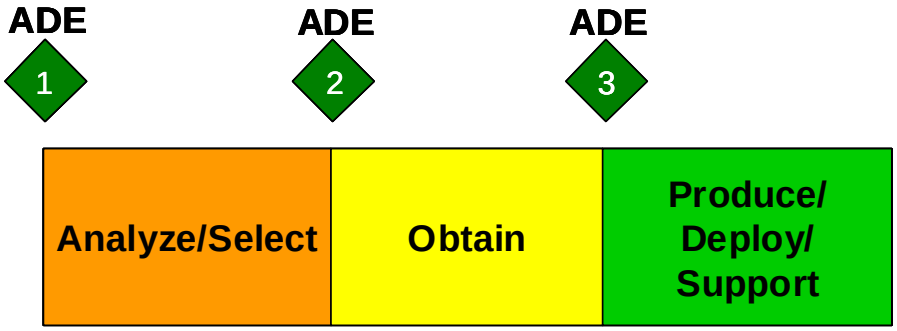


Figure 2-2. Coast Guard Non-Major ADEs and Phases

d. Project funding responsibility. The responsibility to resource (fund and staff) new systems during the NMAP moves between the Project Sponsor and PM as the project progresses through the process phases. Due to the nature of the NMAP, Project

Sponsors should have prepared RPs and OMB 300 documents prior to the project's designation as a Non-Major Acquisition Project. The PM takes the lead on updating most project resource documents when the project is designated a NMAP. The following paragraphs summarize resource responsibilities by Non-Major Acquisition Phase.

(1) Analyze/Select Phase. If applicable, the PM prepares resource proposals and updated OMB 300 documents needed to support the project as a line item in CG budget requests. The PM ensures that a LCCE is prepared.

(2) Obtain Phase. If applicable, the PM updates the RP and OMB 300 documents needed to support the project as a line item in CG budget documents. The Project Sponsor, with assistance from the PM, updates the mission support RP.

(3) Produce/Deploy/Support Phase. The Project Sponsor updates the mission support RP.

(4) General Guidance. Non-Major Acquisition Project Sponsors and PMs must reach out to mission support organizations when preparing resource documents to ensure all mission support requirements are identified, the associated costs accurately estimated, and the mission support requirements are addressed in RPs. When preparing resource documents, Project Sponsors and PMs must ensure mission support organizations have the resources needed to plan how the system will be supported in addition to having the resources required to support the system when it is in the field.

D. C4&IT Acquisitions Excluded from NMAP. All C4&IT major acquisitions should follow the MSAM. The NMAP directs that non-major C4&IT acquisitions follow the SDLC. Command, Control, Communications, Computers and Information Technology (C4&IT) System Development Life Cycle (SDLC) policy, COMDTINST 5230.66 describes SDLC authorities, roles and responsibilities, and provides high-level guidance for ensuring compliance with all requirements. The U.S. Coast Guard System Development (SDLC) Practice Manual provides more detailed guidance describing the actions necessary, including event sequences, to ensure compliance with enterprise C4&IT policy requirements. Readers involved with C4&IT acquisitions excluded from NMAP should consult these two references for current guidance.

Chapter 3 - Acquisition Mission Support Planning

The CG is undergoing a modernization effort to improve CG mission support and mission execution capabilities. One of the primary motivations of CG modernization is to provide the field the best support possible. Consistent with the CG modernization, there are four cornerstones to a common business approach to mission support. Recognizing and planning for these cornerstones throughout the acquisition process are critical to ensure mission support. The four cornerstones are:

1. A service-wide commitment to configuration management
2. Total asset visibility across the CG through an enterprise IT system
3. A bi-level support system consisting of only unit and depot levels
4. A single point of accountability for asset support through the establishment of asset product line managers (PLM)

This chapter provides an overview of the:

1. Mission Support organization
2. Acquisition logistics
3. Description of acquisition logistics planning considerations
4. Key logistics planning functions
5. Summary of logistics planning
6. Resource responsibilities

A. <u>Mission Support Overview</u>

1. The Chief of Staff (future Deputy Commandant for Mission Support (DCMS)) is responsible to consolidate oversight of mission support for the lifecycle management of assets and human resources. Chief of Staff (future DCMS) is the single point of accountability for ensuring CG assets have a support system that efficiently provides everything needed to safely operate and maintain an asset through its lifecycle.
2. To successfully perform their missions, CG assets require mission support that provides:
   a. The right number of people with the right skills in the right place to operate, maintain, support and instruct them.
   b. Maintenance.
   c. Supplies for operations and maintenance and a means of packaging and transporting them.
   d. Support FAC (e.g., piers, hangars).
   e. Information resource support and interfaces.
   f. Information (policies, procedures, operating and maintenance manuals).
3. The CG spends billions of dollars on mission support to ensure its assets are properly supported. Approximately 70% of a system's lifecycle costs are incurred during its operations and disposal phase. Proper mission support planning during the asset's acquisition phase reduces lifecycle costs and enables optimum mission performance.

4. The Asset Project Office (APO) is the Chief of Staff (future DCMS) organization responsible for establishing and providing Project Line support for new CG assets. The APO works with CG Technical Authorities, Logistics Centers, Service Centers and the Acquisition Project to stand up mission support for new assets and is responsible for providing support to the assets until the Product Line is transferred to a Logistics Center or Service Center. APO personnel are an integral part of an acquisition project's success.

B. Acquisition Logistics. This section provides an overview of acquisition logistics. Acquisition Logistics is a multifunctional technical management discipline used to ensure.

1. That support considerations are an integral part of the system's design requirements.
2. That the system can be cost effectively supported through its life-cycle.
3. That the infrastructure elements necessary to the initial fielding and operational support of the system are identified, developed, and acquired.
4. The process of acquisition logistics encompasses all activities required to plan and implement support before a system is delivered to the user. Modifications and product improvements extend the period of performance such that, for contemporary systems, some elements of acquisition logistics continue well into the product life cycle.
5. Effective acquisition logistics emphasizes the development of the most supportable design from among the feasible design alternatives. Related key functions include.
   (a) Integration of mission support requirements in CG Mission Analysis and Operational Analysis.
   (b) Early identification of ORD derived support requirements and logistics constraints, to include their promulgation throughout the design team.
   (c) Advocacy of design alternatives which are superior in terms of overall life-cycle supportability (e.g., lower Total Ownership Cost (TOC), easier maintainability, more extensive standardization, better reliability, etc.).
   (d) Maintaining concurrency with the emergent design baseline configurations.
   (e) Integrating sustainment activities into the evolving verification and Test and Evaluation (T&E) efforts, to include coordination and execution of support-related verification events and reliability lessons learned from other systemic testing.
   (f) Active engagement with the producibility planning and production efforts for quality assurance, monitoring emergent issues for logistics impact, and supply chain optimization purposes.
   (g) Close coordination with the product delivery effort to ensure all required technical data and spare/repair parts and associated support equipment are in place and that the as-built configuration baseline is accurately captured.
   (h) Continuous involvement with the extended support community to ensure that the full range of sustainment services, both interim and final, are properly planned, resourced and executed. This must include performance monitoring and evaluation mechanisms for both the fielded system and the extended life-cycle support enterprise.

(i) Early engagement to evaluate human requirements in terms of knowledge, skills, abilities, qualities, competencies, career, and performance to influence system design and assigned personnel ready to perform concurrent with system IOC demand dates.

C. Logistics Planning Considerations. This section provides an overview of acquisition logistics planning considerations. Logistics/life-cycle support planning is undertaken by the CG to provide a comprehensive plan, and a capable infrastructure, to support the fielded system.

1. The ILSP is the primary logistics planning document. In some cases an Equipment Integrated Logistics Support Plan (EILSP) should be prepared in lieu of a System ILSP IAW reference (f). The PM/ILS Manager (ILSM) should commence initial, formal logistics planning and documentation during the Analyze/Select Phase. Early logistics planning provides the basis for other Government and contractor planning during this phase and for logistics planning in follow-on phases. The plan will become progressively more detailed as the program design activity progresses. It is normally updated when:

   a. New program direction is received.

   b. MS decision reviews are approaching.

   c. Major System configuration changes take place.

2. The purpose of the ILSP is to:

   a. Provide a complete plan for support of the deployed system, addressing and including each support/logistics element.

   b. Provide details of the logistics support program and its relationship with overall program management, to include roles and responsibilities, schedules, and key related activities such as testing and production.

   c. State the acquisition logistics strategy.

   d. Document programmatic logistics decisions.

   e. Provide necessary information regarding the logistics aspects necessary for sound decisions regarding system design and development.

   f. Identify further logistics activities needed.

   g. Provide the basis for preparation of logistics sections of the procurement package, e.g., SOW, Specification and Source Selection, Evaluation Criteria, Award Fee Criteria, etc.

   h. Provide a guide for sustaining a system during its operations and sustainment, and disposal stages.

3. The plan should include all elements of the logistics program and their relationship with overall program management. A properly developed ILSP can ensure coordination of logistics issues among all members of the Government/contractor Integrated Product Teams (IPTs).

4. The overarching Logistics IPT is the ILSMT. The ILSMT advises and assists the PM and ILSM with regard to planning, coordinating, and monitoring schedules and contractor performance. In the planning effort, the team's support includes helping the PM and ILSM.
    a. Prepare the logistics portion of Request for Proposal (RFP), including selecting and tailoring associated CDRL as described in Appendix (C).
    b. Develop logistics source selection criteria.
    c. Develop the logistics interfaces of relevant management plans.
    d. Ensure the accuracy and timeliness of Government inputs.
    e. Evaluate contractor compliance with applicable requirements, regulations. performance and detail specifications, standards, and guidelines.
5. ILSMT meetings are often scheduled in conjunction with key program events. Their frequency depends on the intensity of planning activity. Major program status and contract reviews should include a logistics segment in order to ensure that both program management and other functional area leads are aware of the status of the logistics effort.
6. While the PM/ILSM may tailor the ILSP depending on the acquisition, a thorough ILSP can serve as the principal logistics document for an acquisition program and a source document for summary information in other program plans, such as the Test and Evaluation Master Plan (TEMP). The ILSP must support the attainment of higher-order life-cycle logistics requirements documented in the MNS and the ORD; therefore, these requirements-oriented documents are a logical starting point in ILSP preparation.
7. The ILSP should describe the overall logistics program for the acquisition, encompassing requirements, tasks, and MS. The plan is tailored to the specific needs of each program and should address the total system, including (for example) the end item, training devices, and support equipment. It becomes the life-cycle support implementation plan for all participating activities and should be treated as an integral part of the total program planning process. Successful implementation of the ILSP requires careful management of the numerous logistics support elements and interfaces.
8. Effective logistics planning typically covers the following topics, which are tailored as appropriate to the system being developed:
    a. Operational and organizational concepts involving mission requirements, operational environment, and other bounding parameters.
    b. Maintenance concept, to be extended into a comprehensive maintenance plan for support of the fielded system.
    c. The HSI considerations detailed in Chapter 5.
    d. System readiness objectives for both normal operating profiles and surge situations.
    e. Logistics acquisition strategy involving contractual approaches and incentives; this includes both the logistics aspects of the system acquisition effort and contractual approaches envisioned for interim and sustaining support, as applicable.
    f. Standardization implementation strategy, in order to optimize the presence of

effective and supportable equipment and minimize the logistics footprint of the system under development.

g. Planning and implementation of a Diminishing Manufacturing Sources and Material Shortages (DMSMS)/Obsolescence Management (OM) program in order to identify, preclude and/or solve component obsolescence issues typically associated with the lengthy development timelines of a major acquisition program.

h. Supportability Analysis (SUA) strategy, which, because of its importance, may be provided as an appendix or separate document that describes in detail the SUA activities required and the results expected. This should include maintenance of SUA data after the system is delivered and deployed.

i. Supportability verification and test and evaluation concepts involving identification of specific test issues related to overall objectives and to each support element. This should include both logistics-focused verification and test events and the capturing of support-relevant test performance data from other developmental and operational tests, such as those associated with a failure reporting and corrective action system (FRACAS).

j. The objectives, concepts, trade-off factors, goals, thresholds, special requirements, responsibilities, and validation and verification requirements for each support element.

k. The manner in which the elements of logistics are progressively specified, designed, tested, developed and/or acquired, including integration with the other elements.

l. Support resource requirements involving logistics-related life-cycle funding requirements (funded and unfunded), which are identified by element, program function, and funding source/line.

m. Independent Logistics Assessments (ILAs) (associated with developmental MSs) and Logistics Readiness Reviews (LRRs) (associated with system delivery) to ensure that all aspects of life-cycle support planning and implementation have been properly structured and executed. ILA and LRR planning should include schedules, participating activities and authorities, and (broadly stated) criteria and associated objectives.

n. Post deployment assessments which involve plans that analyze and assess field data feedback related to materiel support and support system performance.

o. All activities involved in providing life-cycle support functions must be cognizant of and concur to their responsibilities, including obtaining the resources associated therewith.

p. Billet phasing plans to operate, maintain, support and instruct the system as required according to planned delivery schedules. This includes pre-commissioning crews, system introduction teams, individual training tracks and group/team training timelines.

9. A comprehensive ILSP should provide system program schedule charts showing the interrelationships among logistics tasks and events and overall program MSs. These charts focus on such elements as management, training, testing, maintenance, and supply

support; and they identify assignments, responsibilities, and events.

10. The MS schedules are the baselines for planning in the materiel acquisition process, therefore:

    a. Key logistics activities and MSs should be reflected in the program schedule charts used by program management. The MSs relate critical support capabilities to overall program success, and help ensure that both key personnel and stakeholders are aware of the logistics status of the program.

    b. MS data should include the nature and timing of the activities of all supporting contractor and Government organizations.

    c. Individual support element sections should include a program schedule showing key program MS achievements for that particular element.

    d. The integrated network schedules should show dependency relationships between logistics elements.

    e. The schedules should provide a clear visualization for management of programmatic and logistics interfaces.

    f. The schedules should illustrate the relationship between SUA results and the various logistics elements and facilitate the identification of support equipment, acquisition events, provisioning activities, procurement lead times, etc.

D. Key Logistics Planning Functions. Every acquisition project must implement certain planning functions and disciplines that are critical to a successful acquisition and logistics development effort. These include:

1. Project Management. The primary tool for effective acquisition project management is the Project Management Plan (PMP). The PMP establishes procedures for the overall management of the approved acquisition project. It provides the framework to define key activities/tasking, responsibilities, and the sequence of events, and serves as the PM's blueprint for successful project execution. It is important that the PM allow sufficient time for review of Logistics Management Information (LMI) in the PMP, and that the necessary review and approval timeframes are also included in the CDRL package with the solicitation. Throughout the course of a major acquisition program, the contractor provides large amounts of data that are critical for establishing effective logistics support during the sustainment phase. Provisioners, reliability engineers, supportability analysts and other SMEs must be provided adequate time to review this data for sufficiency, and contractors must be provided time to develop and revise the data.

   The PMP establishes detailed phase-specific objectives and determines the sequence of development activities needed to attain them. The planning process includes defining key events, accomplishments, and success criteria. The PM should prepare a draft PMP in consultation with all involved operational and support organizations to ensure all necessary tasks are addressed and assigned appropriately.

2. Acquisition Logistics. Acquisition logistics activities are most effective when they are integral to both the contractor's and CG's Support Equipment (SUE) technical and management processes. When this is the case, system designers, acquisition logisticians,

and PMs are best able to identify, consider, and trade-off support considerations with other system cost, schedule and performance elements to arrive at an optimum balance of system requirements that meet the user's operational and readiness requirements.

3. Enterprise Architecture. Enterprise Architecture is the description of the current and/or future structure and behavior of an organization's processes, information systems, and personnel aligned with the organization's core goals and strategic direction. The primary purpose of creating enterprise architecture is to ensure that business strategy and information technology investments are aligned. As such, enterprise architecture allows traceability from the business strategy down to the underlying technology.

4. Because the enterprise architecture describes the "current architecture" as well as the "target architecture," it provides a strategy that will enable an agency to transition from its current state to its target environment. During the acquisition process, acquisition logistics personnel should ensure that current logistics processes are considered in the "current architecture" and that logistics requirements are reflected in the "target architecture." It is especially critical that the overarching CG Enterprise Architecture– both current and, as known, future- are considered in life-cycle support planning, and that the impact of program introduction upon that architecture is understood and acknowledged by all affected activities and stakeholders.

5. Test and Evaluation (T&E). T&E is the process that assesses the actual physical and performance characteristics of System or components against their requirements and specifications. The fundamental purpose of T&E is to verify attainment of technical specifications, operational effectiveness and operational suitability. Projects implementing a formal T&E program should include provisions for technical and operational testing of ILS planning and products to assess the ability of the support System to adequately perform all assigned responsibilities.

   Supportability demonstration and test requirements and criteria are developed for the particular performance characteristics to be tested, perhaps most critically with regard to maintenance effectiveness, technical data accuracy, and manning levels. These requirements are included in the TEMP for the program. All supportability performance requirements, including those that apply to the support system, should be tested and verified. Integration of test planning efforts within the overall SUE approach is a superior methodology for ensuring that test and verification efforts are comprehensive and effective.

E. <u>Test and Evaluation in Acquisition Phases</u>

1. T&E planning (including logistics T&E planning) should begin in the Analyze/Select Phase. T&E planning addresses Measures of Effectiveness (MOEs) and Measures of Suitability (MOSs) with appropriate quantitative criteria. These criteria include test event or scenario descriptions, resource requirements (e.g., special instrumentation, test articles, validated operational simulations, actual threat Systems, and personnel), and test limitation identification.

2. T&E for logistics extends over the entire acquisition cycle; and it includes:

   a. Development Test & Evaluation (DT&E)

b. Operational Test & Evaluation (OT&E).

c. Supportability Assessments.

3. DT&E is part of the Analyze/Select Phase. It verifies the attainment of technical performance specification thresholds and objectives. The tests are normally conducted by the prime contractor under conditions that are not fully representative of field operation.

4. The CG executes OT&E to assess a System's operational effectiveness and suitability, including the adequacy of the System's logistics support during the Obtain Phase of development. OT&E is performed in an environment as operationally realistic as possible.

5. A complete evaluation of the System's supportability design parameters and the logistics elements should be conducted during this phase, and should employ production representative Systems whenever possible. All deltas between test and production configurations should be formally documented and entered into the test record. This evaluation may continue into the next phase, Production & Deployment, using low-rate initial production pilot or full-rate production items. All logistics products should be provided in a condition or configuration that is close to or identical to the one to be provided after deployment.

6. As a minimum, the operational test environment should include:

   a. representative military operation and maintenance personnel.

   b. Training personnel who have completed initial training as well as other performance support interventions IAW the performance support & training (PS&T) system plan.

   c. draft technical manuals and MPCs.

   d. production representative Systems.

   e. support equipment selected for operational use.

   f. realistic operating environment.

7. A supportability assessment is performed in multiple general stages. The first is the conduct of an ILA, in coordination with Commandant (CG-4), to support significant program MSs. The ILA supports ADE-2A for a Major Systems Acquisition Project and supports ADE-2 for a NMAP Project. The second is assessment as part of the formal DT&E and OT&E programs, along with the rest of the developmental system elements. The third is the conduct of a comprehensive LRR at or around initial system delivery. The LRR supports ADE-2B or ADE-3 for a Major Systems Acquisition Project and ADE-3 for an NMAP Project. Finally, ongoing assessments should be performed after deployment through analysis of operational, maintenance, and supply data on the System in its sustained operational environment. Figure 3-1 illustrates when an ILA is conducted for a Major Systems Acquisition Project and Figure 3-2 shows when an ILA is conducted for an NMAP Project. Figure 3-3 shows when an LRR is conducted for a Major Systems Acquisition Project and Figure 3-4 shows when an LRR is conducted for an NMAP project.

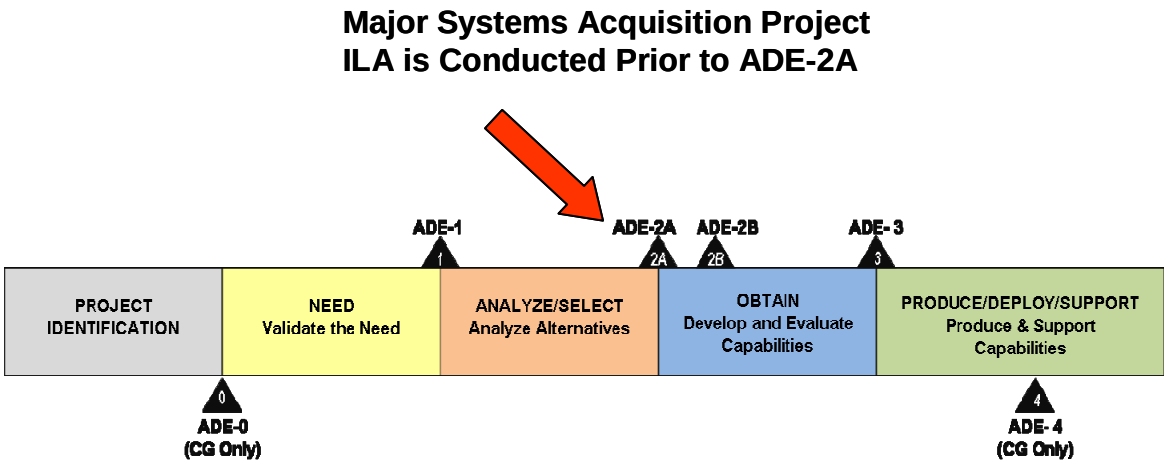


Figure 3-1. ILA Timing Major Acquisition

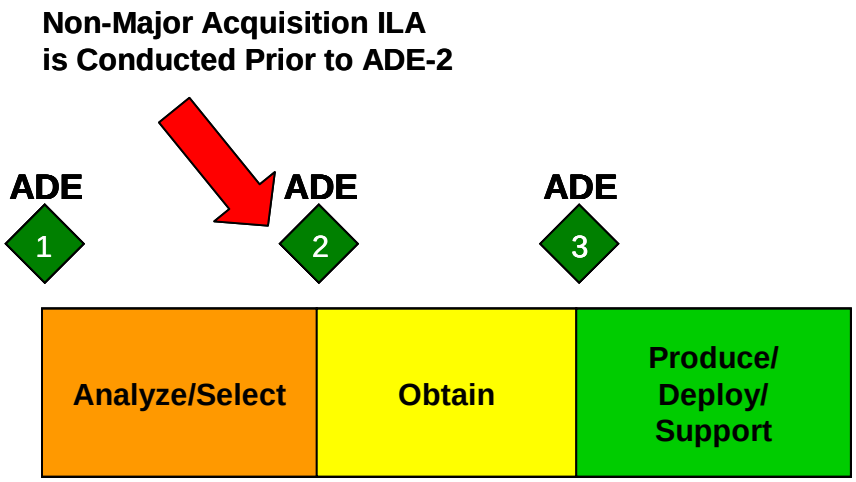


Figure 3-2. ILA NMAP Timing

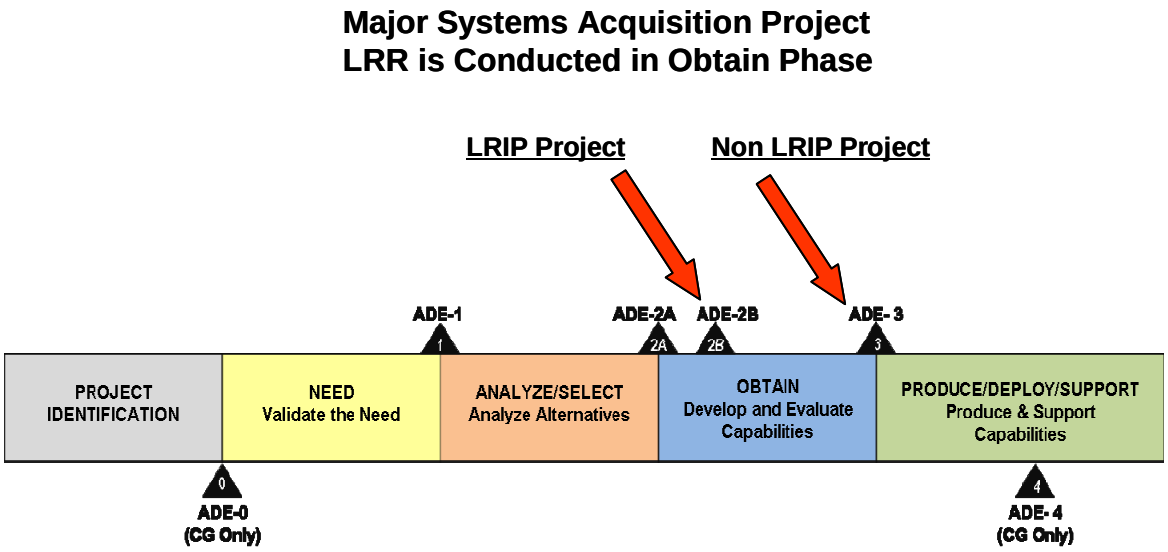


Figure 3-3. LRR Timing Major Acquisition

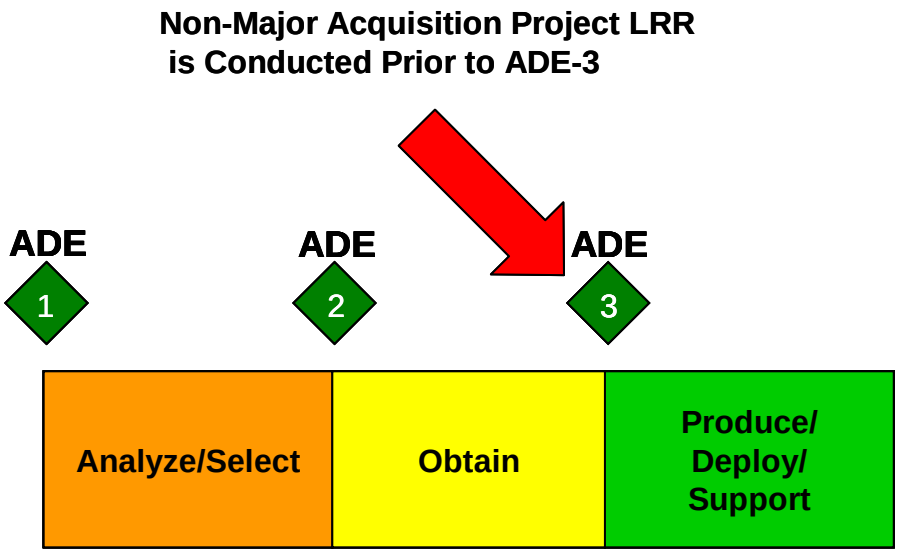


Figure 3-4. LRR Timing NMAP

8. As a practical matter, the majority of the logistics T&E will take place in the latter stages of the Obtain Phase or in the early stages of the Production/Deploy/Support Phase, when the associated logistics products are available.

9. As a System evolves through design, development, and integration, the emphasis in testing moves from DT&E, which is concerned chiefly with validating the contract requirements and the attainment of engineering design goals and manufacturing processes, to OT&E, which focuses on operational effectiveness, operational suitability, and supportability. The TEMP should provide guidance for this transition.

10. Supportability demonstration and test requirements and criteria are developed for the particular performance characteristics to be tested, and are included in the TEMP. All

supportability performance requirements, including those which apply to the support System, should be tested and verified insofar as is possible, including through the use of modeling and simulation. Results of supportability assessment and verification activities are used to update other supportability analyses information and estimates, including associated LMI issues resulting from analysis of supportability assessment results are used to develop improvement recommendations. The TEMP should contain provisions for ensuring these results are disseminated correctly for action.

11. Acquisition logistics personnel must be a participant in any T&E IPT planning of DT&E and OT&E and should be directly responsible for the planning of supportability assessments.

12. Participating with the appropriate IPTs and the PM in the planning of DT&E and OT&E programs, the acquisition logistics professional should develop detailed logistics T&E objectives for each acquisition phase and incorporate these objectives into the formal test programs. It is imperative that both the contractors and the Test Activity representatives have a detailed understanding of all test objectives and processes, and that any disagreements are resolved prior to commencing testing. Assessments of logistics elements may require additional or separate tests, but logistics factors can typically be incorporated into other System test and demonstration events, particularly with regard to reliability and maintainability. Two common examples are validating the accuracy of technical manuals and demonstrating prescribed maintenance tasks in order to evaluate maintenance planning and development efforts. These are generally initiated prior to the formal test programs in order to reduce delays during testing. The evaluation of particular logistics elements is further discussed below.

F. Logistics Planning Summary. There are several keys to developing and implementing a successful logistics program. Among these are:

1. Active and early logistics involvement in all program planning, beginning before program initiation when the initial MNS is prepared.
2. Close adherence to ORD requirements and thresholds/objectives as the basis of life-cycle support planning.
3. Effective use of the ILSMT in the planning and development processes.
4. Preparation, promulgation and maintenance of a comprehensive ILSP tailored to the system being acquired.
5. Implementation of the ILSP as an ongoing and integral element of the overall program.
6. Aggressive pursuit of standardization and early obsolescence management.
7. Integration of the logistics development, SUE and verification/test and evaluation efforts.
8. Coordination with, and formal concurrence of, impacted stakeholders and support activities.

G. Mission Support Organization Resource Responsibilities for Major Systems Acquisitions and Non-Major Acquisitions. Project Sponsors and PMs prepare project resource (funding and staffing) requests for Major Systems Acquisition Projects and Non-Major Acquisitions.

Mission support organizations must work with Project Sponsors and PMs to ensure each project's mission support resource requirements are identified and funded. Mission support organizations are responsible to:

1. Provide complete, timely, and accurate input to Project Sponsor and PM requests for resource information. At a minimum, mission support organizations will be expected to provide:
   a. Input on the resources (funding and staffing) needed to plan a new asset's mission support. Input must clearly articulate the resources needed to plan mission support and why the resources are needed. Input must identify when the resources are required. In the case of staffing, mission support must identify the time period when the billets or positions are needed.
   b. Information concerning the resources (funding and staffing) required to support the asset in the field. Resource requests must identify both one-time costs (e.g., initial provisioning) and the recurring costs (e.g., parts and supplies used for recurring maintenance).
   c. Cost estimates for resource requirements. To ensure proper resources are provided, the impact of inflation must be addressed when providing cost estimates for future year requirements.
2. Be proactive with respect to resource requests. Mission support organizations must reach out to Project Sponsors and PMs to ensure mission support resource requirements are addressed.
3. Work closely with Project Sponsors and PMs to ensure a smooth transfer of responsibility for preparation of resource documents. After assets are in the field, mission support organizations will be expected to prepare budget documents to fund mission support activities. To ensure new asset readiness, the transfer of responsibility for preparing budget documents from Project Sponsors and PMs to mission support organizations must be seamless.

Chapter 4 - Integrated Logistics Support (ILS)

Overview. ILS is a technique used to ensure that the supportability of an asset is considered throughout its life cycle.

A. There are traditionally 10 ILS elements:

(1) Design Interface. Design interface reflects the relationship of the various supportability parameters to other system design parameters. These parameters include human factors, system safety, energy management, standardization, interoperability, survivability, vulnerability, reliability, maintainability, environmental compliance, and affordability.

(2) Maintenance Planning (MPA). Maintenance planning is the process conducted to establish maintenance concepts and support requirements for the life of the system. It encompasses levels of repair, repair times, maintenance procedures or techniques, support equipment needs and contractor or government responsibilities.

(3) Supply Support (SUS). SUS is all the management actions, procedures, and techniques used to determine requirements to acquire, catalog, receive, store, transfer, issue and dispose of secondary items. This encompasses provisioning for initial support and all end-to-end replenishment SUS and supply pipeline plans and activities. SUS must be distribution based rather than inventory based and proactive rather than reactive.

(4) Support and Test Equipment. Support and test equipment is all the management actions, procedures, and techniques used to determine requirements for and acquire the fixed and mobile equipment needed to support the operations and maintenance of a system. This includes materiel handling equipment (MHE); tools; test, measurement, and diagnostic equipment (TMDE); calibration equipment; prognostics/imbedded diagnostics; and automated test equipment (ATE). In addition, this element includes all plans and activities required to operate, maintain, and support all system support equipment.

(5) Manpower and Personnel (MAP). MAP include the identification and provisioning for military and civilian personnel with the skills and grade levels needed to operate, maintain, and support a system over its life. This element includes all positions required to operate, maintain, support and instruct the system. Manpower may be resourced as military, civilian or contractor. Early acquisition phases rely on manpower estimates that are refined during the acquisition to align with the system design and logistics plans. Cost estimates should consider the acquisition program staff requirements; including technical authorities and system introduction teams; and the system sustainment requirements from the product line staff through the end user. Costs related to personnel changes in the workforce should be highlighted, such as new skills or ratings.

(6) Training and Training Support. Training and training support consists of the processes, procedures, and techniques to identify and document performance support and training requirements for and to acquire programs of instruction, training FAC, and training systems/devices needed to train/qualify military and civilian personnel to operate and maintain a system proficiently. This includes institutional training, on-the-job training (OJT), new equipment training, sustainment training, and individual/crew training.

(7) Packaging, Handling, Storage, and Transportation (PHS&T). PHS&T includes the resources, facilities, processes, procedures, design considerations, and methods needed to

ensure that all system equipment and support items are preserved, packaged, stored, handled, and transported quickly, safely, and effectively.

(8) Facilities. FAC are all the management actions, procedures, and techniques used to determine requirements for and to acquire the permanent and semi permanent real property assets needed to support operation, maintenance and storage of a system and its support equipment. This element includes new and modified FAC, special environmental conditions, and utilities.

(9) Computer Resources Support(CRS). CRS is all the management actions, procedures, and techniques used to determine requirements for and to acquire hardware, middleware, firmware, software, documentation and support supplies required to support and upgrade computer resources used in operation and maintenance of the system. This includes fixed and mobile FAC required for CRS.

(10) Technical Data. Technical data are all the management actions, procedures, and techniques needed to determine requirements for and to acquire recorded system information, technical manuals and technical drawings associated with the system, its operation, its maintenance, and its support. Technical data for all support equipment are also included under this ILS element. Although computer programs and related software are not considered technical data, any documentation about computer programs and software support is considered technical data.

B. Coordinating ILS with Systems Engineering. All elements of ILS must be developed in coordination with the system engineering effort and with each other. Tradeoffs may be required between elements in order to acquire a system that is affordable (lowest life cycle cost), operable, supportable, sustainable, transportable, and environmentally sound within the resources available. Figure 4-1 illustrates how ILS is an input to the SYE process.

C. ILS Relationships to ILSP. The planning for ILS for a system is normally contained in an ILSP. ILS planning activities coincide with development of the system acquisition strategy, and the program should be tailored accordingly.

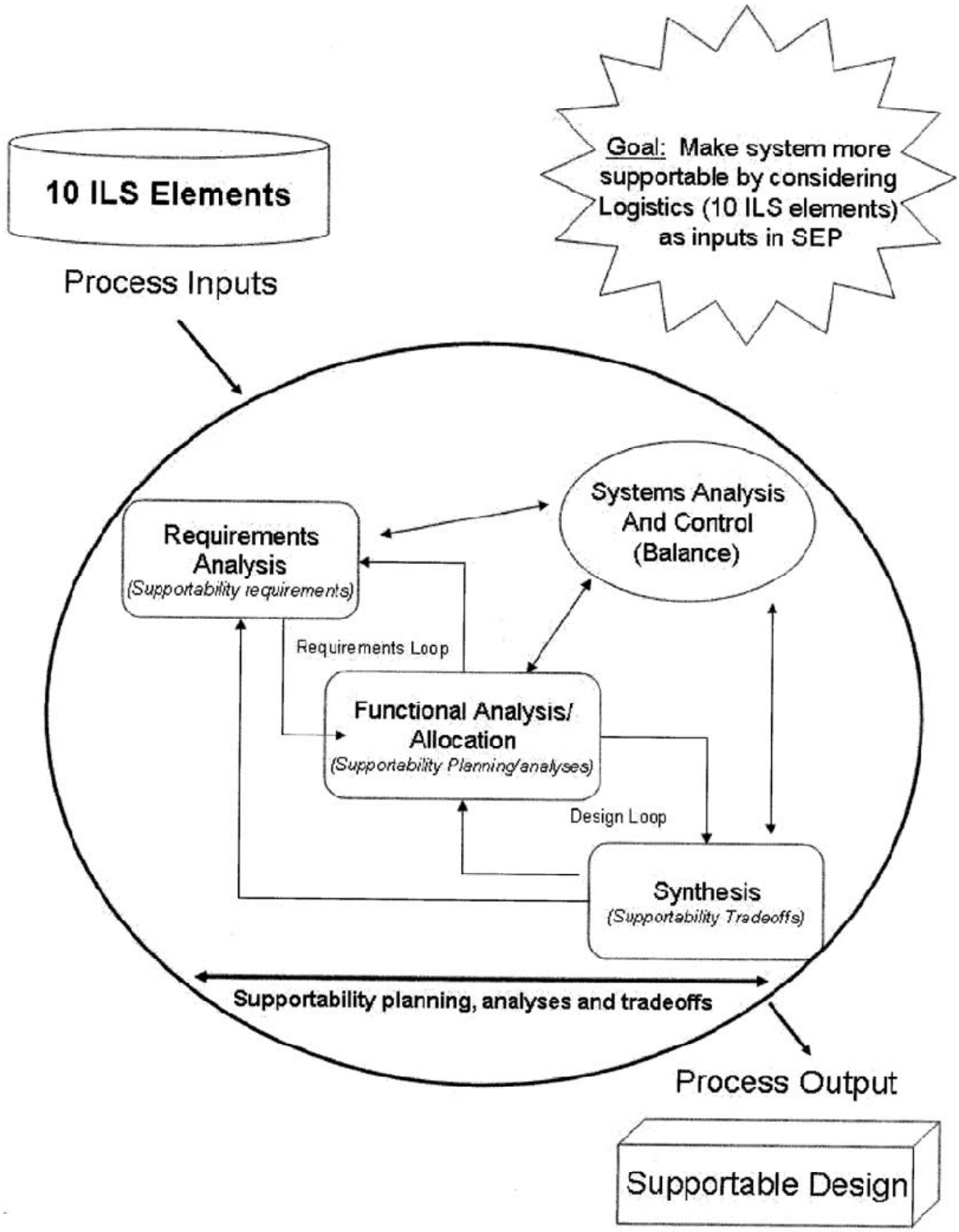


Figure 4-1. ILS and the Systems Engineering Process

Chapter 5 – Implementing Integrated Logistics Support (ILS)

A. Overview. This chapter further describes the traditional ILS elements and the processes used to ensure each element is adequately considered throughout the asset's life cycle.

B. ILS Element - Design Interface.

1. Design interface. Design interface is the relationship of logistics-related design parameters of the system to its projected or actual support resource requirements. These design parameters are expressed in operational terms rather than as inherent values and specifically relate to system requirements and support costs of the system. The basic items that need to be considered as part of design interface include:

   a. Human Systems Integration requirements

   b. Reliability requirements

   c. Availability requirements

   d. Maintainability requirements

   e. Configuration Management requirements

   f. Standardization requirements

   g. Interoperability requirements

   h. Safety requirements

   i. Security requirements

   j. Usability requirements

   k. Environmental and hazardous material (HAZMAT) requirements

   l. Privacy requirements, particularly for computer systems

   m. Legal requirements

   n. Quality Assurance requirements

2. The ILS element, Design interface, is considered through the System Engineering (SYE) process. An additional reference is found in the System Engineering Life Cycle (SELC) guidance contained in reference (g), Appendix B.

   a. SYE involves applying formal processes, tools, and organizational constructs to implement a systemic approach to coordinating disparate functional elements. Effective SYE efforts are characterized by rigorous two-way traceability from "parent" to "child" requirements through each progressively detailed level of system design; a formally documented systems architecture which overlies the efforts of each functional element and sub-element; and careful management of interfaces within the system and subsystems, as well as selected external interfaces. It is the overarching process applied to derive an operationally effective and suitable system from a stated capability need. SYE encompasses the application of formal processes across the acquisition phases and is intended to be the integrating mechanism used to arrive at balanced solutions addressing capability needs, design considerations and constraints,

and supportability requirements, while factoring in the limitations imposed by technology, budget, schedule, and the existing CG support infrastructure.

b. There are many elements to be considered in the SYE process. Some are obvious, such as design engineering and production planning. Others, for example environmental compatibility, electromagnetic compatibility, vulnerability, and commonality, must also be considered. Systems engineers and their respective IPTs are chartered to ensure these somewhat more esoteric elements remain formal consideration factors during design trade-offs, program planning, and evaluations. The ILSMT must ensure that supportability and reliability engineering representatives are actively engaged on design and SYE IPTs, and that life-cycle support consideration is part of the SYE process. Through an effective SYE program, the use of common tools, processes, rules and forums helps to ensure that all functional elements remain aware throughout design evolution.

c. A major objective of SYE is the achievement of a proper balance among performance (including readiness and supportability), risk, cost, and schedule objectives. This goal is achieved by employing the following top-down iterative steps that define the SYE process. requirements analysis, functional analysis and allocation, design synthesis and verification, and system analysis and control.

d. Chapter 2 of the MSAM lists all SYE activities for all acquisition phases. While a formal and extensive SYE program is not mandated for all acquisitions, due to associated costs and resource requirements, some tailored version of SYE should be applied. Major acquisitions should attempt to apply some form of a formal SYE regime from the outset of the program.

e. During the requirements analysis portion of the SYE process, a key first step to ensuring life-cycle sustainability is the application of supportability analyses as part of system requirements development. The initial supportability analyses should focus on the relationships between the evolving operational and readiness requirements, planned support structures, and comparisons with existing force structure and posture. The output of this initial segment should be an integrated ORD, which reflects both operational and support concepts that are acceptable to the end users.

f. The primary focus of follow-on supportability analyses should be examining the user's operational and readiness requirements using guidance provided in the MNS and the ORD. The output of these efforts should identify key issues or supportability factors that should be considered when operational needs are later translated into supportability requirements. Supportability factors are those operational needs that, by their nature, impose requirements on the support system and thus affect system supportability. Examples of supportability factors include deployment cycles, mobility requirements, and mission frequency and duration.

g. System maintainability and supportability goals are best achieved by addressing support requirements as elements of the SYE trade-off and decision criteria.

h. While the focus of the effort is on system design, production and fielding, SYE should be applied throughout the system's life-cycle as a comprehensive, iterative approach. As the system moves through the life-cycle phases, new or updated user

requirements and new or revised directions or limitations established by the acquisition decision authority are likely. Accordingly, SUA efforts will continue on an iterative, and often concurrent, basis as updated user requirements and authoritative directions are provided. The data derived from both analytical efforts and actual mission performance will be applied for continuous product improvement for both forward and back-fit application.

i. Synthesis of the physical design begins when hardware items are selected to provide identified functions and are arranged in a physical relationship with one another. During this stage of design development, analysis is used to verify adherence to each successively higher level of performance requirement. Estimates and projections are refined and verified through demonstrations and tests. Supportability factors such as standardization, reliability, maintenance accessibility, redundancy, and the like are critical considerations during design integration, and a failure to take them into account during development will invariably lead to cost increases and performance degradation during the actual system deployment.

j. The flow of the SYE processes is iterative within any one phase of the acquisition process and recursive at successively lower levels of the system structure. SYE processes are applied to allow an orderly progression from one level of development to the next more detailed level through the use of controlled baselines. These processes are used for the system, subsystems, and system components as well as for the supporting or enabling systems used for the production, operation, training, support, and disposal of that system.

k. During the course of technical management processes and activities, such as trade studies or risk management reviews, specific requirements, interfaces, or design solutions may be changed to increase system-wide performance, achieve cost savings, or meet scheduling deadlines. The value of these processes is not only in the transition of requirements from design to system, but as an integrated framework within which the universe of requirements can be, as a collective whole, defined, analyzed, decomposed, traded, managed, allocated, designed, integrated, tested, fielded, and sustained.

l. Because the SYE process is iterative in nature, synthesis within the process is critical. Feedback loops between the requirements analysis, functional analysis, and design syntheses are an essential part of the process. Of these, the feedback loop between the synthesis element and the design requirements element represents the verification process, involving testing and evaluation, audits, and design reviews to provide appropriate feedback regarding the attainment of system requirements.

m. System readiness and supportability characteristics and objectives must be included in the design parameters and design guidance during the early phases when significant trade-offs are most easily accomplished. Thereafter, these characteristics must be reevaluated continually through the life of the program, considering among other factors opportunities for technology insertion to enhance readiness and supportability. Readiness and supportability characteristics must be considered in performing functional and trade-off analyses, and the SYE process provides the framework for enabling the effective acquisition of a supportable system.

3. Human Systems Integration (HSI). When the CG mission requirements generate new systems, the systems are conceptualized, designed, produced, evaluated, operated, supported, refreshed, and disposed to meet the needs, capabilities and constraints of the CG Human Resources, end users and supporters.

   a. The HSI Program. People are integral to the Total System, shown below in Figure 5-1, and must be integrated with hardware and software components for a truly effective and efficient design. Hardware and software, no matter how complex the combination, exist only as tools for people to use to accomplish missions. There is no such thing as an "unmanned system." They must be intentionally designed to be usable, suitable and acceptable for their intended users. The fundamental SYE objective should be to "equip the man" rather than "man the equipment."

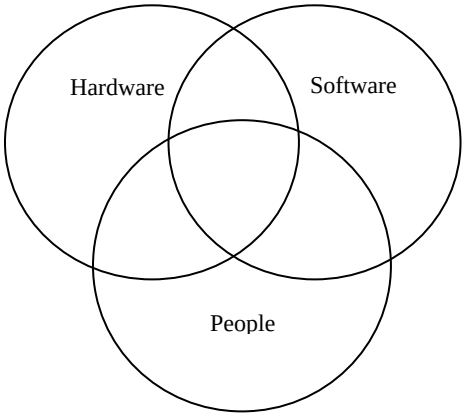


Figure 5-1 – Total System

   (1) The CG's HSI Program focuses on the integration of human considerations into the system acquisition process to enhance personnel-system design, reduce life cycle ownership costs, and optimize total system performance. It accomplishes this by ensuring that the "human" is fully and continuously considered as part of the total system in the development and/or acquisition of all systems.

      (a) HSI influence is most effective when applied proactively at the outset of system design. Reactive HSI interventions become increasingly costly and difficult as the system matures. HSI is either proactive or reactive depending on resourcing, timing and project support.

      (b) HSI elements must be applied collectively as a systems engineering discipline rather than as individual logistics elements.

      (c) HSI is about system – material solutions. It focuses on HSI for acquisitions and fosters HSI in the sustainment organization.

      (d) Human Performance assumptions exist throughout any proposal. HSI seeks to validate the guesses made during the acquisition of platforms.

      (e) HSI is key to TOC given that people costs comprise the largest portion of an acquisitions LCC.

(f) HSI is key to Operational Effectiveness given that only people can translate asset capabilities into mission effectiveness.

(g) Systems must be designed for the average recruit-able sailor, with minimal skill levels and available aptitudes – system must be designed for the population pool available.

(2) Per reference (h), the Chief, Office of Human Systems Integration for Acquisition (CG-1B3), serves as the Technical Authority representation relating to manpower, personnel, human performance (including training), human factors engineering, occupational health, system safety and personnel survivability for all facets of major system acquisitions including ships, aircraft, C4&IT, logistics systems and the associated workforce.

(3) HSI domain SMEs will function as dedicated or on-call core members of Integrated Concept Team (ICT)/Matrix. The HSI representatives on the IPT/Matrix will ensure that HSI constraints are identified, HSI is embedded in requirements documents as applicable, and an audit trail of HSI issues and concerns are provided in applicable program documents such as reports or minutes. The audit trail should include the information in the Human System Integration Plan (HSIP), a HSIP-like tracking document or common data elements (CDEs). As the system responsibility transitions from the ICT to the PM (and IPT), HSI representatives will ensure that HSI requirements are documented in the crosswalk from ORD to RFP, the system specification, and TEMP, as applicable. The HSI SMEs would assist the PM in ensuring that HSI requirements are met and issues resolved. The HSIP and the SEMP are excellent managerial tools to facilitate planning, organizing, and managing HSI activities. The HSIP can be either a stand-alone document or a subset of the SEMP.

(4) Although each HSI domain has been introduced separately, in practice, they are often interrelated and tend to impact on one another. Changes in system design to correct a deficiency in on HSI domain nearly always impact another domain. To ensure HSI considerations have the greatest impact on system design, they must be integrated into the system acquisition process as early as possible. Early analysis in the program is especially valuable in identifying potential error- or problem-prone design features. To ensure HSI is embedded in the system acquisition process, analytical tools must be applied when they can provide the greatest influence to the total system. HSI assessments will be conducted prior to MS decision reviews to ensure HSI has been properly applied and to identify impacts thereof.

b. HSI Common Data Elements. The CDEs are those elements of information that are required to be included in these documents. Hence, the CDEs will be recorded on the ICT reports and minutes for the purpose of ensuring continuity of issues and concerns raised during the various ICT meetings and the transferable to the materiel developer and IPT process. CDEs were determined to be:

(1) <u>HSI issues</u>. Includes not only issues and concerns, but also potential opportunities, such as emerging technology, to positively impact the program.

(2) Impacts. The impacts and risks associated with the issue, opportunity, and alternative courses of action.

(3) Solutions. Plans to address each issue or concern. This may also include potential solutions or opportunities not fully explored.

(4) Current status. Including those actions taken, decisions/resolutions made, by whom, when, where, and how.

(5) Lead. Who has assigned lead for specific actions and who is supporting/impacted.

(6) HSI common data elements. May be used as a tracking system by the PM but requires full documentation and specification of paragraphs above.

c. HSI Seven Domains. HSI integrates and facilitates trade-offs among the seven domains but does not replace individual domain activities, responsibilities, or reporting channels. Each HSI domain is described in greater detail in the following paragraphs:

(1) Manpower. Manpower addresses the number of military and civilian personnel required and potentially available to operate, maintain, sustain, and provide training for systems. It is the number of personnel spaces (required or authorized positions) and available people (operating strength). It considers these requirements for peacetime, conflict, and low intensity operations. Current and projected constraints on the total size of the CG/organization/unit are also considered. The HSI practitioner evaluates the manpower required and/or available to support a new system and subsequently considers these constraints to ensure that the human resource demands of the system do not exceed the projected supply. An example of a manpower constraint is there cannot be any increase to the manpower end-strength of the CG to support the acquisition of a new system. If a system requires additional manpower, offsetting billets must be identified. Maintenance and support requirements are typically workload driven and determined by the system itself or the CONOPs. Operator requirements are more frequently determined by doctrine.

(2) Personnel Capabilities. Manpower and personnel are closely related. While manpower looks at numbers of spaces and people, the domain of personnel addresses the cognitive and physical characteristics and capabilities required to be able to train for, operate, maintain, and sustain materiel and information systems. Personnel capabilities should be identified early in the acquisition process and may result in specific thresholds.

Qualification requirements for Commissioned Officers, Warrant Officers, Enlisted personnel and Civilian employees are managed IAW reference (i). On most systems, emphasis is placed on enlisted personnel as the primary operators, maintainers, and supporters of the system. In many cases, the technical and command & control demands placed on officers and warrant officers is a major concern in system acquisition. It must also be remembered that with information systems, the primary operators and maintainers may be civilians as is depot level maintenance and supply of materiel systems. The civilian General Schedule (GS) series qualification requirements are contained in the X-118 and local crediting plans address wage grade qualifications. This must be considered and evaluated in the acquisition of a system. Early in the requirements determination process,

identification of the target audience should be accomplished and used as a baseline for assessment as well as a guide in system design. Cognitive and physical demands of the system should be assessed and compared to the projected supply. All testing of a system should utilize typical service personnel of the planned routing and pay grade. HSI also takes into consideration personnel factors such as availability, recruitment, skill identifiers, promotion, and assignment.

(3) Training. Training is defined as the instruction, education, on-the-job, or self-development training required providing all personnel and units with essential job skills, and knowledge. Performance support and training interventions are used to bridge the gap between the target audience's existing level of knowledge and that required to effectively operate, deploy/employ, maintain and support the system. The HSI goal is to acquire systems that meet the CG's training thresholds for operation and maintenance. Key considerations include developing an affordable, effective and efficient training strategy (which addresses new equipment, training devices, institutional, sustainment, and unit collective tactical training); determining the resources required to implement it in support of fielding and the most efficient method for dissemination (contractor, distance learning, exportable packages, etc.); and evaluating the effectiveness of the training. Training is particularly crucial in the acquisition and employment of a new system.

New tasks may be introduced into a duty position; current processes may be significantly changed; existing job responsibilities may be redefined, shifted, or eliminated; and/or entirely new positions may be required. It is vital to consider the total training impact of the system on both the individuals and the organization as a whole. Clearly, the cost and considerations of system ownership include initial, interim and sustainment training. Embedded training is the preferred method of training. Reference (j), Enclosure 7, paragraph E7.6 is quoted in part as stating, "The PM shall develop training system plans to maximize the use of new learning techniques, simulation technology, embedded training, and instrumentation systems that provide anytime, anyplace training and reduce the demand on the training establishment." In addition, training must consider the unique needs of commissioned officers, warrant officers, enlisted, and civilian personnel.

(4) Human Factors Engineering (HFE). The goal of HFE is to maximize the ability of an individual or crew to operate and maintain a system at required levels by eliminating design-induced difficulty and error. HFE work with systems engineers to design and evaluate human-system interfaces to ensure they are compatible with the capabilities and limitations of the potential user population. HFE is conducted during all phases of system development, to include requirements specification, design and testing and evaluation. HFE also includes the requirements of the HSI Domain of Habitability. The PM is required to establish habitability requirements for the physical environment (e.g., adequate space and temperature control) and, if appropriate, requirements for personnel services and living conditions that have a direct impact on meeting/sustaining system performance or that have such an adverse impact on quality of life and morale that recruitment/retention is degraded. HFE activities during requirements specification include. evaluating predecessor systems and operator tasks; analyzing user needs; analyzing and allocating functions;

and analyzing tasks and associated workload. During the Software Design Description (SDD) phase, HFE activities include evaluating alternative designs through the use of equipment mock-ups and software prototypes; evaluating software by performing usability testing; refining analysis of tasks and workload; and using modeling tools such as human figure models to evaluate crew station and workplace design and operator procedures. During the testing and evaluation phase, HFE activities include. confirming that the design meets HFE specification requirements; measuring operator task performance; and identifying any undesirable design or procedural features.

(5) System Safety (SYS). SYS is the design features and operating characteristics of a system that serve to minimize the potential for human or machine errors/failures that cause injurious accidents. Safety considerations should be applied in system acquisition to minimize the potential for accidental injury of personnel and mission failure. For example, one primary concern may be electrical safety. The SYS engineer should determine the requirements for grounding the system, procedures that must be followed to safely power-up or power-down the system, and the potential system malfunctions that could cause an electrical fire.

(6) Health Hazards (HH). HH addresses the design features and operating characteristics of a system that create significant risks of bodily injury or death. Along with safety hazards, an assessment of health hazards is necessary to determine risk reduction or mitigation. The Programmatic Environment, Safety and Occupational Health Evaluation (PESHE) document is a management tool used to help PMs identify and manage environment, safety and occupational health (ESOH) hazards and risks, and determine how best to meet ESOH regulatory requirements. The government will create a PESHE to manage ESOH requirements.

The goal of the Health Hazard Assessment (HHA) is to incorporate biomedical knowledge and principles early in the design of a system to eliminate or control HHs. Early application will eliminate costly system retrofits and training restrictions resulting in enhanced soldier system performance, readiness and cost savings. HHA is closely related to occupational health and preventive medicine but gets its distinctive character from its emphasis on soldier-system interactions of military unique systems and operations. HH categories include acoustic energy, biological substances, chemical substances, oxygen deficiency, radiation energy, shock, temperature extremes and humidity, trauma, vibration, and other hazards. HHs include those areas that could cause death, injury, illness, disability, or a reduction in job performance. For example, system evaluation should ensure that there is neither excessive noise nor opportunity for exposure to dangerous emissions.

(7) Personnel Survivability (SSv). SSv addresses the characteristics of a system that can reduce fratricide, detectability, and probability of being attacked, as well as minimize system damage, personnel injury, and cognitive and physical fatigue. It was added to focus attention on those aspects of the total system that can minimize the loss of friendly troops' lives. For example, ensuring the system does not have an identifiable electronic or thermal signature or create an unacceptable fratricide risk may enhance survivability. The SSv evaluation would also ensure that there is

adequate ballistic protection for crew survivability (e.g., application of antispalling material in crew compartments).

The program manager should fully assess system and crew survivability against all anticipated threats at all levels of conflict early in the program, but in no case later than entering Obtain Phase. The PM should integrate the T&E process to address crew survivability issues. Damage to the equipment by enemy action, fratricide, or an improperly functioning component of the system can endanger CG personnel. The SSv program should assess these events and their consequences. Once these initial determinations are made, the design of the equipment should be evaluated to determine if there are potential secondary effects on the personnel. Each management decision to accept a potential risk should be formally documented by the appropriate management level.

Unless waived by the Milestone Decision Authority (MDA), mission-critical systems, including crew, regardless of acquisition category, should be survivable to the threat levels anticipated in their projected operating environment as portrayed in the system Threat Assessment. Design and Testing ensure that the system and crew can withstand man-made hostile environments without the crew suffering acute chronic illness, disability or death.

d. HSI in the Source Selection Process

(1) Treatment of HSI - System HSI requirements is communicated to industry through the RFP process, and is included as tasks in contract SOWs.

(2) HSI will be treated as a distinct major managerial and technical area based in part on the results of analyses provided by the associated ICT or IPT recommendations, and/or the contents of the ORD or SEMP, or directions from the Sponsor or Training representative. Of critical importance is the role of HSI in the final source selection process. HSI needs to be identified as a factor in the selection process so that contractors address it in their responses to the RFP. Once actual work begins, HSI issues will be continuously addressed and evaluated throughout the life cycle of the program. This is especially important since the majority of the CG's life cycle costs for fielding are incurred for personnel and human resources.

(3) Treatment of HSI domains will be tailored appropriately to suit the nature and priorities of the program and contract effort.

(4) Implementation Program managers have a responsibility to address human systems integration as an essential part of the overall system design and acquisition process.

(5) Solicitations shall require offerors to respond to all pertinent HSI considerations in the SOW, which shall reflect requirements from the ORD/MNS (and possibly enhanced through market research and/or IPT contributions). Important HSI issues or opportunities identified in the ORD shall be addressed and evaluated as specific, stand-alone functional requirements in the SOW.

(6) The specifications will describe how the system is to operate for the user in the operational environment, how the human influences performance parameters, and in the quality assurance paragraphs, how those requirements shall be verified.

Specifications should also clearly identify any HSI objectives and thresholds identified in the ORD.

(7) HSI deliverables under the contract should be included in the contract data requirements list CDRL.

(8) HSI considerations should be included in section L, Instructions to Offerors, and section M, Evaluation Factors, for award.

(9) HSI considerations need to be an explicit part of the source selection planning and implementation process. All required and appropriate HSI requirements and opportunities will be evaluated and considered in the best value trade-off analyses associated with source selection for acquisition of all CG systems.

(10) The Source Selection Evaluation Board (SSEB) should include representatives from each of the respective HSI domains where appropriate.

C. ILS Element - Maintenance Planning

1. Maintenance planning begins early in the acquisition process with the development of the maintenance concept. It is conducted to establish requirements and tasks to be accomplished for achieving, restoring, and maintaining the operational capability for the life of the system. Maintenance planning relies on Level of Repair Analysis (LORA) as a function of the system acquisition process. Maintenance planning will define the actions and support necessary to ensure that the system attains the specified system readiness objectives within minimum Life Cycle Costing (LCC).

   a. Set up specific criteria for repair, including Built-In Test Equipment (BITE) requirements, testability, reliability, and maintainability; support equipment requirements; automatic test equipment); and manpower skills and facility requirements.

   b. State specific maintenance tasks, to be performed on the system.

   c. Define actions and support required for fielding and marketing the system.

   d. Address warranty considerations.

2. This element is evaluated to verify proper alignment of maintenance tasks to maintenance levels and the appropriate selection of support equipment and personnel to perform maintenance. A structured maintainability demonstration is an effective evaluation mechanism; at a minimum, the demonstration should include all organizational and selected depot level tasks. It is important that (at least) draft versions of all relevant maintenance data be assessed, for consistency as well as technical accuracy and adequacy.

3. Maintenance planning is considered in the SUA process and the CM process.

   a. Supportability Analysis. This section provides an overview of the SUA process, roles and responsibilities, the analysis requirements by phase, and a description of the types of analyses that may be performed.

b. SUA is conducted to determine the optimum set of logistics resource requirements needed to sustain desired system effectiveness within life-cycle cost objectives. Examples of specific types of analyses include trade-off analysis, LORA, risk analysis, reliability predictions, reliability centered maintenance (RCM) analysis, failure modes, effects and criticality analysis (FMECA), life-cycle cost analysis, maintenance task analysis, FAC analysis, sensitivity analysis, training requirements analysis, and others.

c. The results of the SUA efforts are usually reported in the form of summaries such as:

   (1) MPA summary

   (2) Repair summary

   (3) Support and test equipment summary

   (4) SUS summary

   (5) Manpower, personnel, and training summary

   (6) FAC requirements summary

   (7) PHS&T summary.

d. The SUA portion of the SYE process begins with the identification of an operational need. The initial operational requirements and concepts are evaluated to identify support implications and alternatives. As with any integrated effort, SUA activities must be aligned with the related SYE disciplines whose activities provide essential support planning information relative to the system design.

e. Because logistics considerations are an element of SYE, they must be integrated into the SYE process from the outset. SUAs are essential in each stage of the process. A word of caution is in order with regard to the relationship between the design engineer and the logistician. At times, design objectives (e.g., limiting weight/space impact) may be in conflict with the supportability and maintainability concerns (e.g., building in redundancy to optimize operational availability) of the logistician. In such cases, trade studies can be employed to identify the proper resolution of such conflicts. When conflicts do occur, it is important that readiness and supportability issues be given the same importance as other major programmatic factors such as schedule compliance, developmental cost control, and optimal system performance. To state that logistics and supportability analyses are a part of SYE does not imply that the logistics voice is subservient to the engineering voice on the design team or in the project office. Done properly, all program elements are integrated into, and aligned with, the overall SYE effort. Organizationally, the logistician must be a principal player in the development process.

f. The core of the SUA process is the generation of Logistics LMI data. LMI is used by both the CG and the contractor to assess design status, conduct logistics planning, influence program decisions, and obtain required support resources. The data can also be used by the CG to verify that the contractor is meeting the system performance and supportability requirements as specified by contract. LMI is further explained later in this chapter.

g. SUA and the development and management of the associated LMI is expensive and time consuming. It is critically important to carefully tailor the SUA effort for each acquisition program. The focus and level of detail for supportability analyses depend upon the acquisition strategy and how far along the system is in the acquisition cycle. The design maturity of the system under development and its associated support system is a basic consideration in deciding which analyses should be performed. Typically, upgrades, commercial off the shelf (COTS) and non-development item (NDI) acquisitions offer more mature designs, and a significant portion of necessary support planning data may already be available.

h. Comprehensive and effective maintenance planning is heavily dependent upon a properly conducted LORA in order to optimize the support system in terms of LCC and materiel readiness. LORA is a powerful tool to assist decision-makers in resolving a wide variety of ILS related issues such as:

(1) Preferred maintenance concept.

(2) Optimum maintenance task distribution.

(3) Repair versus discard criteria.

(4) Allocation of support equipment.

(5) Manpower requirements at each level of maintenance level.

(6) Alternative mixes of organic and contractor support.

(7) Extent and duration of interim contractor support (when applicable).

(8) Support required for materiel fielding.

(9) Warranty considerations.

(10) FAC requirements.

(11) Cost to achieve target operational availability (A_o).

i. Roles and Responsibilities. The PM/ILSM is responsible for successful completion of SUA and the approval of LMI. The contractor necessarily performs many SUA; and it is therefore very important that the requirements for analytical reports be clearly addressed in contractual terms, including both the SOW and the CDRLs. The range and depth of SUA efforts and associated LMI must be understood by all parties to the contract; experience has shown that a failure to manage expectations up-front often results in unanticipated cost growth. The net results may not reveal themselves until the system has been fielded, when resources may be expended to correct deficiencies in design or support which would have been prevented by more timely SUA efforts during system development.

j. The government ILS lead must ensure that an appropriately tailored SUA effort is defined and agreed to as close to contract start-up as possible. Also, data format and content, delivery and approval processes, and associated resource requirements and responsibilities must be understood by both parties. The ILSMs must then in turn ensure that their respective management chains understand the specific costs and importance of the SUA effort as early in the design and development cycle as

possible.

k. Analysis Requirements by Phase. The objectives and specific SUA activities, including the depth to which they are conducted, depend upon the acquisition phase of the program. The acquisition phases are generally defined by the state of design development for the total system. Program requirements and objectives should be aligned with the phase of the acquisition process that most closely represents the design activities to be accomplished. SUA conducted within any acquisition phase should be properly aligned with the specific objectives of that phase as defined by the acquisition strategy. Too often acquisition programs attempt to make decisions before sufficient knowledge of a given design element is known. This results in re-work, corrective actions, and an increase in risks and costs.

l. Supportability factors must be considered in an organized manner throughout design and/or planning actions for the system being acquired to include each applicable logistics support element. Only by including logistics considerations as formal elements in the design trade-offs within the SYE process - and throughout the development cycle - can the program achieve its operational goals at the optimal life-cycle cost. The support of the design is inextricably interrelated with the design of the support.

m. Analyze/Select Phase. During the Analyze/Select Phase, the design of a system is typically flexible and provides opportunities for identifying alternatives and examining trade-offs from a supportability standpoint (for example, discard versus repair). A focal point of the SUA effort during Analyze/Select Phase is formalizing the planning, scope, execution, scope and management of the SUA effort itself. This includes process definition and scheduling to ensure proper alignment with critical program events such as CDR. Examples of early SUA which should be undertaken during this phase include Use Studies identifying support-related factors from mission objectives and requirements documents and Comparative Analyses which are used to examine the support profiles of similar or predecessor systems to identify deficiencies as well as potential support solutions.

n. The primary purpose of an Analyze/Select Phase LORA is to guide the design of the system for supportability. Data based on engineering estimates may be unreliable. Therefore, sensitivity analysis must be conducted to assess how variations in the LORA input parameters affect the baseline maintenance concept and impact associated risks.

o. Initial analyses can be conducted across a range of logistics/supportability elements, based on similar/baseline systems, formal estimating relationships, and experience. Examples of initial or higher-order supportability analyses include RCM analysis, LCC analysis, PS&T analysis and FMECA.

p. Obtain Phase. During both the Obtain Phase and Produce/Deploy/Support Phase, LORAs are usually conducted to establish an optimal support or maintenance structure for the system (for example, assignment of source, maintenance, and recoverability (SM&R) codes). In the Obtain Phase, analyses are conducted to develop detailed information about required maintenance actions, spares, support equipment, training, and manpower. SUA is also used to develop preliminary

technical publications and the details for the provisioning effort. SUA can also assist in making major program decisions such as selection of contractor logistics support versus organic CG logistics support.

q. Assessment and verification of supportability starts with early planning for verification of support concepts and continues on a recurring basis. Assessment and verification methods and techniques encompass technical reviews, modeling, simulation, demonstration, and testing. Assessment and verification procedures, like all SUA activities, need to be tailored to the type of acquisition, the program phase, and the risk elements being addressed.

r. In order to demonstrate system supportability, test and demonstration requirements and criteria are developed for the particular performance characteristics to be tested. These requirements are normally included in the TEMP for the program. All supportability performance requirements, including those which apply to the support system, should be formally tested or otherwise verified. Results of supportability assessment and verification activities are used to update other SUA information and estimates. Issues resulting from analysis of supportability assessment results are used to develop improvement recommendations.

s. Supportability factors must be analyzed and assessed throughout the design and/or planning evolution, including each applicable logistics support element. Supportability factor analysis, in keeping with the overall SYE process, continues throughout the development cycle in a recurring fashion. The initial analyses should focus on the relationships of the evolving operational and readiness requirements, planned support structures, and comparisons with existing force structure and support posture; subsequent iterations focus more specifically on the evolving system design, component selection, production and fielding efforts.

t. The following items are some examples of supportability factors:

(1) Operations and maintenance personnel and staff-hour constraints.

(2) Personnel skill level constraints.

(3) Life-cycle and Operations and Support cost constraints.

(4) Target percentages of system failures correctable at each maintenance level.

(5) Mean down time in the operational environment.

(6) Turn-around time in the operational environment.

(7) Standardization and interoperability requirements.

(8) Built-in-fault isolation capability.

(9) Transportability requirements (identification of conveyances on which the system and its components are transportable).

u. Types of Supportability Analyses. The following items are examples of the types of analyses that might typically be performed in the course of a major CG acquisition program. These analyses may be undertaken by the CG, contractors, or jointly.

Use Study. The use study defines the intended use of the system/component and the

operational and support environments of that system/component. Quantitative support factors such as transportation modes and durations, allowable maintenance periods, and environmental requirements (including the identification, reduction and control of hazardous materials (HAZMAT), hazardous wastes, and other pollutants), are identified. The use study should include consideration of the following items:

(1) Planned deployment scenarios.

(2) Transportability requirements.

(3) Mission frequency and duration.

(4) Human factors (system complexities and the supportability implications).

(5) Anticipated service life.

(6) Standardization and interoperability.

v. Analysis of Comparative Systems. This analysis identifies baseline systems for comparison. Both operational and sustainment issues associated with the design and the support infrastructure for the baseline systems are examined. The analysis strives to:

(1) Define a sound analytical foundation for projecting a new system design and related supportability features

(2) Identify aspects that need improvements over those in existing systems.

(3) Identify those features that will likely drive cost, support, and readiness of the new system.

w. Evaluation of Technological Approaches/Opportunities. The purpose of this analysis is to identify technological advancements and state-of-the-art design approaches that offer opportunities to achieve new system support improvements. Use of available technological approaches is emphasized to improve upon projected safety, cost, support, and readiness values; to reduce a new system's environmental impact; and to resolve qualitative support problems.

x. Post-Production Support. The Post-production SUA should identify items that are single/dual source or those for which the CG cannot obtain data rights; that is, items that will no longer be available after the production of the system under development is completed. The related plan of action to alleviate projected problem areas should consider organic support capability, production line buy-out, or contractor logistics support agreements.

y. Trade-off Studies. Desirable and practical trade-offs among requirements, technical objectives, design, program schedule, functional and performance requirements, and life-cycle costs must be identified and conducted throughout the development process. Trade-off studies should employ sensitivity analysis to ensure consistency and optimization of resources; that is, aspects or functions which offer greater impact shall be concentrated on when pursuing solutions and allocating resources.

z. When considering alternative systems/components or alternative support concepts, the following items are representative of appropriate comparison criteria.

(1) Life-cycle cost comparisons

(2) Diagnostic characteristics (e.g., Built-in-Test (BIT))

(3) Weight/space impacts

(4) Manning impacts

(5) Energy characteristics

(6) Standardization percentages

(7) Transportability characteristics

(8) FAC requirements.

aa. Maintenance Planning Analysis. The contractor typically performs the maintenance planning analysis. The resulting summaries provide maintenance planning information to the CG and may be used to develop initial fielding plans for the end items' support structure, in that they provide data which is critical to defining maintenance tasking at both levels, spare/repair parts and support equipment identification, technical data, and other logistics elements. Both unit and depot levels of maintenance should be accounted for, and preventive and corrective maintenance actions should be identified. Additional supporting information, such as elapsed time of maintenance actions, task frequencies, failure rate, mean times to repair, and man-hour allocations by maintenance action and level, should be required for each item.

bb. Repair Analysis. For each item being repaired, these reports should identify repair/discard recommendations, propose the appropriate level of maintenance (unit or depot), and wherever possible estimate the associated costs. Further, repair analyses are a primary source for deriving the placement and allocation of spares, support equipment, and personnel. The repair summaries should also provide an explanation of the input data used and their source, the operational scenario modeled (which must be consistent with that referenced in the ORD, CONOPs, and other higher-order mission-descriptive documents), assumptions, constraints, maintenance alternatives considered, the analytical method and model used, and a discussion of the sensitivity evaluations performed in reaching the summary conclusions and recommendations.

aa. Support and Test Equipment Analysis. These summaries provide the CG with data necessary to register, or verify the registry of, support or test equipment in the CG inventory. They may provide details of the TMDE calibration procedures, technical parameters, and any item of support equipment needed. An objective of these analyses is to minimize the use of special purpose support and test equipment, and also to eliminate redundant procurement of standard/general purpose support and test equipment which has multiple applications throughout the system.

bb. Supply Support Analysis. These summaries provide the CG with information that may be used to determine initial spare and repair part requirements and support the cataloging of all items to be procured through the provisioning process. Some outputs of supply support analysis include the identification of the system breakdown (e.g., Illustrated Parts Breakdown (IPB) lists; maintenance coding (e.g., SM&R codes); maintenance replacement factors (MRF); overhaul rates; roll-up quantities;

design change information; long lead items, bulk items, tools, test equipment, etc. These summaries may also allow for review of Provisioning List Item Sequence Number (PLISN) assignment or cross-referencing.

cc. Manpower, Personnel, and Training Analysis. These summaries summarize the findings of the training requirements analyses and provide justification for the most effective and efficient means to support validated operations and maintenance requirements. The analysis report should identify corrective and preventive maintenance tasks, operations tasks, manpower estimates for each task by maintenance level, personnel skills required to perform the maintenance tasks, and any associated training required. It is essential that the ultimate operational and support manning profile be derived from rigorous analysis and be feasible; factors such as fatigue, sickness, leave, training time, make-ready/put-away time, FAC upkeep, and watch standing requirements must be included in the man-hour estimates used to develop the manning profile. It is incumbent upon the PM and ILSM to accurately identify valid manning requirements, and to defend them against unrealistic reduction efforts.

ee. FAC Analysis. These summaries identify the facilities required to maintain, operate, train, and test an item. The facilities include organizational or depot maintenance training, mobile, and test FAC. All aspects of FAC, including safety, proximity, utilities, and environmental factors must be considered. The summary information derived help plan for any modification to an existing facility or development of a new facility. Early stage FAC analysis efforts must be validated by formal site surveys, and the long-lead times associated with FAC funding, planning and execution require PMs and ILSMs to ensure that FAC is an early and consistent area of emphasis.

ff. Packaging, Handling, Storage, and Transportation (PHS&T) Analysis. These summaries identify the PHS&T requirements. They also provide information relevant to the development of a transportability analysis report. PHS&T SMEs must remain engaged with the evolving design efforts of both the system and its support infrastructure, in order to ensure that considerations such as feasibility, transportability, safety, shelf-life management, and regulatory requirements are fully accounted for.

gg. Post-production SUA. The purpose of these analyses is to review life-cycle support requirements of the new system and associated items prior to closing production lines. These reviews ensure the appropriate support for the system over its remaining life. They identify potential deficiencies in the future support posture, together with alternative solutions, to alleviate those anticipated support difficulties. Post-production support planning is directly integrated with the program's supply support, standardization and obsolescence management efforts.

hh. Failure Modes and Effects Criticality Analysis (FMECA). FMECA is an analytical procedure whereby each potential failure mode in a system is analyzed to determine its results or effects on the entire system. The analysis then classifies each potential failure mode according to its severity or mission impact. It further attempts to identify all single points of failure, i.e., those points where failure of the component can cause failure of the entire system. The results of the FMECA can be utilized in

the design process to reduce the probability of failures through design modification mechanisms such as redundancy, prognostics, graceful degradation, etc.

ii. From a FMECA to identify the components which are most critical to system availability. The purpose of the analysis is to develop a maintenance program that is designed to increase system availability by identifying mitigation actions for potential failures that may degrade system effectiveness. The analysis uses a decision tree as a guide for complete analysis of each significant item. While equipment is in operation, preventive maintenance tasks are identified and scheduled on a routine, periodic basis to prevent failures and keep the equipment operational. Preventive maintenance tasks fall into two subcategories. scheduled inspection and scheduled removal. RCM methodologies can be integrated with Condition Based Maintenance Plus (CBM+) enablers such as health monitoring and diagnostics/prognostics to develop a comprehensive maintenance regime that best supports mission availability within operational and resource constraints.

D. ILS Element - Supply Support.

1. Supply support encompasses all management actions, procedures, and techniques used to determine requirements to:

   a. Acquire support items and spare parts.

   b. Catalog the items.

   c. Receive the items.

   d. Store and warehouse the items.

   e. Transfer the items to where they are needed.

   f. Issue the items.

   g. Dispose of secondary items.

   h. Provide for initial support of the system.

   i. Acquire, distribute, and replenish inventory.

2. This element is evaluated to verify that the quantities and types of items and supplies designed to maintain the system in its prescribed state of operational readiness are adequate. Both routine and surge usage rates should be assessed. SUS is considered in the Provisioning process.

   a. Provisioning Overview. This section provides an overview of the provisioning process, roles and responsibilities, and planning and management considerations.

   b. Provisioning is the process of determining the range and depth of spare and repair parts required to support an end item. This includes initial as well as life-cycle support. Reprovisioning is accomplished throughout the life-cycle. The CG cannot afford to over- or under-provision systems; under-sparing can have mission and even safety impacts; over-sparing can have significant cost, as well as weight, space and management impacts. The level of SUS must match the assigned maintenance levels and the frequency and criticality of need.

c. The primary objectives of CG provisioning activities, Surface Forces Logistics Center (SFLC) and Aviation Logistics Center (ALC), are to ensure that the necessary initial stocks of support items and associated technical documentation are available at using organizations and support activities and that logistics information is updated with field experience (e.g., failure and usage data) to assure accurate and efficient sustainment throughout the life-cycle.

d. Provisioning must be addressed in the early stages of any acquisition in order to determine SUS requirements and provide items prior to the transition to full CG organic support. Provisioning normally occurs during the Produce/Deploy/Support phase.

e. Predicting the range and depth of spare and repair parts needed at each level requires extensive analysis. Provisioning efforts must consider all items, such as spares and repair parts, special tools, test equipment or support equipment, and consumables such as special lubricants or bulk materials. A major part of the process is aligning with the maintenance concept to determine the maintenance level (organizational or depot) for each item supported. This is accomplished as a core component of the SUA process.

f. Provisioning is accomplished using the data provided by formal Provisioning Technical Documentation (PTD). PTD requirements must be specified in the SOW (sometimes in the form of a formal Provisioning Requirements Statement) and supported by associated CDRLs. The level of detail for the PTD depends on whether the equipment has parts that wear-out, fail, require replacement, or require maintenance, and whether the equipment has previously been provisioned for another CG or other service acquisition or support program.

g. Following are some examples of PTD types, each of which typically will have a dedicated CDRL as part of the system procurement package:

   1. Engineering Data for Provisioning. The recorded scientific or technical information (manuals, drawings and specifications) that support the PTD.

   2. Provisioning Parts List (PPL). This portrays the physical composition of an end item that has been determined to be configuration worthy and repairable. It should be in a logical order, such as top-down breakout, and shows information such as part number (PN)/name, quantity in the equipment, etc. The PPL should contain a list of all parts subject to wear or failure and any equipment required for maintenance.

   3. Long Lead Time Items List. This is a list of items, generated after lowest repairable/replaceable units have been identified, that require long manufacturing lead-time or for which limited production capability exists. It should be received in advance of other PTD to allow early ordering of the items.

   4. Repairable Items List. This lists repairable items identified within the hierarchy of the end item broken down by an agreed upon configuration control method.

   5. Tools and Test Equipment List. This is a list of the support items, such as test sets, that are used to inspect, test, service, calibrate, or repair an end item.

6. Interim Support Items List. This is a preliminary PPL which is used to determine if any parts require interim support if the normal provisioning process cannot be completed prior to the operational use of a platform/equipment. It is usually a "best guess" based on experience and may be used to develop a preliminary allowance list.

7. System Configuration Provisioning List. This list establishes the work breakdown relationships of the components of an end item. It is normally used to check configuration integrity.

8. Statement of Prior Submission. This identifies an item as already supported and catalogued by the CG or other service.

h. Provisioning Technical Documentation Submission Schedules (PTDSS) should be established to plan the PTD submission and review activities on a subsystem/package basis. It should outline, in a monthly percentages illustration, the planned (and, ultimately, completed) submittals. It should also denote critical PTD that the contractor should submit in ratio to the physical construction of an end item.

i. Provisioning should be accomplished for all new systems requiring maintenance. PTD should be required if the CG may at any point need to directly support the system, including overseeing future competition for that support. Waivers of provisioning requirements, either during negotiations or after contract award, are not normally permitted. Provisioning should be a life-cycle process with reprovisioning accomplished as determined through the SUS review program.

j. Roles and Responsibilities. The PM/ILSM has the following responsibilities:

(1) Obtain inputs from the applicable provisioning activities concerning provisioning requirements.

(2) Ensure that correct and complete provisioning requirements, appropriately tailored, are included in the contracts/purchase documents for systems or equipment or engineering changes.

(3) Require systems integrators and manufacturers to include the requirement for PTD in their subcontracts.

(4) Plan, program, and budget for the acquisition of required PTD.

(5) Monitor the schedule of PTD submissions to the provisioning activity.

(6) Monitor the technical support manager's and provisioning activity's progress.

(7) Establish and chair (or delegate chair authority) provisioning conferences. Hold a provisioning guidance conference (PGC), typically within 90 days after production contract award.

(8) Establish and participate in provisioning IPTs.

(9) Develop the PTDSS and track progress of PTD submittals.

(10) Obtain or develop maintenance philosophy outline and maintenance guide.

(11) Measure the adequacy of the provisioning process.

k. Technical Support Managers are normally the SMEs in Commandant (CG-4), and the Logistics Centers. Their responsibilities include:

(1) Provide engineering representation, as applicable, for technical matters pertaining to provisioning.

(2) Coordinate resource requirements with provisioning and maintenance activities for maintenance and SUS as required.

(3) Assist with the development of maintenance philosophies and concepts and the assignment of SM&R codes.

(4) Obtain or develop maintenance guides.

l. The primary CG provisioning activities are the SFLC (for hull, mechanical and electrical (HM&E) and electronics) and the ALC (for aviation systems). Provisioning activities should have a documented provisioning process based on clearly defined readiness objectives, maintenance philosophies, available resources, and the appropriate provisioning model. The PM should approve all departures from the provisioning model, in consultation with the appropriate provisioning activity.

m. Planning and Management Considerations. The CG conducts provisioning based on one of three functional approaches. Each has its merits and shortcomings. In determining which approach to employ, the provisioning activity should consider factors such as the IPT structure, physical location of the sponsor and contractor, the end item design, size, maintenance concept and special parts requirements. The three models are:

9. Conference Team method is the establishment of a CG team consisting of functional experts from areas such as cataloging, requirements determinations, and SM&R coding. It is most often used for contracts when the majority of the materiel is CG furnished but may be suitable for highly complex projects.

10. In-House Provisioning involves members of the provisioning team performing provisioning responsibilities at their respective command/organization.

11. Resident Provisioning Team is the establishment of a permanent provisioning team at a contractor's facility, with specialists assigned on a temporary basis as needed.

n. Provisioning activities should:

(1) Develop and maintain internal provisioning policies and practices and recommendations for CG wide provisioning policy.

(2) Provide provisioning contract control numbers to the PTD submitter(s).

(3) Receive PTD from the system integrator or system/equipment manufacturer.

(4) Assist in the development of Provisioning Requirements Statements/SOW and associated CDRLs.

(5) Review and verify PTD and technical coding IAW the contract data requirements list, data item descriptions, and the maintenance plan.

(6) Determine SUS configuration/allowance parts list (PL) worthiness.

(7) Assign SM&R codes based on approved maintenance concepts.

(8) Provide budget inputs for both initial provisioning and projected system stock requirements.

(9) Participate in provisioning conferences and meetings.

(10) Ensure equipment identification; assign Equipment Identification Codes (EICs) as required.

(11) Build initial outfitting lists.

(12) Perform Federal Logistics Information System (FLIS) screening.

(13) Coordinate national stock number (NSN) assignments for new items of supply.

(14) Initiate Interservice Supply Support Agreements (ISSA) with other Government agency (OGA) item managers for support of items already managed elsewhere within the federal supply system.

(15) Build complete and accurate allowance documents that reflect the approved support and maintenance philosophies, concepts and plans.

(16) Prepare and provide status reports as required.

(17) Inventory and/or stage SUS materiel as directed.

(18) Fit-out platforms/end items as required.

(19) Coordinate the selection of the best provisioning method with the PM or sponsor and the technical support manager.

(20) Maintain a SUS review program for each platform under their cognizance. SUS reviews should ensure that adequate SUS is in place. This includes monitoring allowance accuracy, feedback reports, failure and usage rates, etc. As platform operational mission and/or maintenance requirements change, the initial SUS projections may no longer meet program requirements.

o. It is imperative that usable data format requirements and a plan to transfer the data from the contractor be developed. Provisioning data will generally be delivered in an electronic database, which can be uploaded to existing CG databases; supplementary PTD (SPTD) may also be in digital form but may also be hardcopy technical manual extracts, catalogue cut sheets, etc. The contractor should be permitted wide latitude in the choice of computer applications to gather provisioning data. However, the data must be delivered in a format that is compatible with applicable CG provisioning databases. The CG may furnish a provisioning data submission system/software for use by the contractor. The manufacturer, system integrator or contractor should be tasked with:

(1) Developing or procuring and delivering PTD IAW the terms of the contract.

(2) Including the same provisioning information requirements established under the contract in vendor/subcontractor contracts.

(3) Obtaining written confirmation from vendors and subcontractors that the vendor/subcontractor will comply with the data requirements or a letter of refusal if they do not intend to comply.

(4) Participating in provisioning conferences and activities as required.

E. ILS Element - Support and Test Equipment. Support and test equipment includes all equipment, mobile and fixed, that is required to perform the support functions, except that equipment which is an integral part of the system. Support equipment categories include:

1. Handling and maintenance equipment.
2. Tools (hand tools as well as power tools).
3. Metrology and measurement devices.
4. Calibration equipment.
5. Test equipment.
6. Automatic test equipment.
7. Support equipment for on- and off-equipment maintenance.
8. Special inspection equipment and depot maintenance plant equipment, which includes all equipment and tools required to assemble, disassemble, test, maintain, and support the production and/or depot repair of end items or components.

This also encompasses planning and acquisition of logistics support for this equipment.

This element is evaluated to determine its effectiveness, the validity of the planned requirements, and the progress achieved toward meeting those requirements. Test and evaluation should verify that all items function as required and that no requirement exists for items not listed. Compatibility, integration, and interoperability are significant evaluation issues.

Support and Test Equipment is considered in the SUA process previously discussed.

F. ILS Element - Manpower and Personnel. MAP involves identification and acquisition of personnel with skills and grades required to operate and maintain a system over its lifetime. Manpower requirements are developed and personnel assignments are made to meet support demands throughout the life cycle of the system. Manpower requirements are based on related ILS elements and other considerations. HFE or behavioral research is frequently applied to ensure a good man-machine interface. Manpower requirements are predicated on accomplishing the logistics support mission in the most efficient and economical way. This element includes requirements during the planning and decision process to optimize numbers, skills, and positions. This area considers:

1. Man-machine and environmental interface.
2. Special skills.
3. Manpower is optimized when it balances mission expectations with asset configuration in terms of workload, watches, and evolution positions.
4. Human factors considerations during the planning and decision process. MAP is

considered in the HSI process. MAP, and the following ILS element, Training and Training Equipment, are tested and evaluated to ensure that:

a. That the system in its operational environment meets the needs of the planned number of personnel and the skills they possess.

b. The effectiveness of the validated PS&T system, as reflected in the ability to operate, support, and maintain the materiel system under test, is assessed.

c. Accurately representative training devices are provided in the correct quantities and at the proper functional areas.

d. All initial PS&T system interventions are in place and that all appropriate actions are either complete or in progress to establish interim and long-term, sustainment PS&T solutions.

G. ILS Element - Training and Training Support

(1) Training and training devices support encompasses the processes, procedures, techniques, training devices, and equipment used to train personnel to operate and support a system. This element defines qualitative and quantitative requirements for the training of operating and support personnel throughout the life cycle of the system. It includes requirements for:

a. Competencies management.

b. Instructor and key personnel training.

c. New equipment training team.

d. Resident training.

e. Sustainment training.

f. User training.

g. HAZMAT disposal and safe procedures training.

(2) Embedded training devices, features, and components are designed and built into a specific system to provide training or assistance in the use of the system. (One example of this is the HELP files of many software programs.) The design, development, delivery, installation, and logistics support of required embedded training features, mockups, simulators, and training aids are also included.

(3) Key aspects include curricula development; instructor qualification; training aid planning and acquisition/development, including mock-ups, representative configurations, embedded training, modeling and simulation, and electronic courseware; evaluation metrics; integration with existing CG and other service training regimes; and the use of contractor training services.

(4) Planning and implementing the training program as an integrated element of the overall logistics and SYE efforts ensures that training is aligned with configuration and technical elements of the system design and support construct. Integrating training with the overall SUA effort further serves to ensure that training is a core component of the extended CG support solution.

(5) Training and training support is considered in the HSI process to be discussed below.

H. ILS Element - Packaging, Handling, Storage, and Transportation (PHS&T)

1. This element includes resources and procedures to ensure that all equipment and support items are preserved, packaged, packed, marked, handled, transported, and stored properly for short- and long-term requirements. It includes material-handling equipment and packaging, handling and storage requirements, and pre-positioning of material and parts. It also includes preservation and packaging level requirements and storage requirements (for example, sensitive, proprietary, and controlled items).

2. This element includes planning and programming the details associated with movement of the system in its shipping configuration to the ultimate destination via transportation modes and networks available and authorized for use. It further encompasses establishment of critical engineering design parameters and constraints (e.g., width, length, height, component and system rating, and weight) that must be considered during system development. Customs requirements, air shipping requirements, rail shipping requirements, container considerations, special movement precautions, mobility, and transportation asset impact of the shipping mode or the contract shipper must be carefully assessed. PHS&T planning must consider:

   a. System constraints (such as design specifications, item configuration, and safety precautions for hazardous material).

   b. Special security requirements.

   c. Geographic and environmental restrictions.

   d. Special handling equipment and procedures.

   e. Impact on spare or repair parts storage requirements.

   f. Emerging PHS&T technologies, methods, or procedures and resource-intensive PHS&T procedures.

   g. Environmental impacts and constraints.

   h. PHS&T requirements are considered in the SUA process previously discussed.

   i. These evaluations will determine whether:

      (1) Provided transportability instructions are adequate.

      (2) Conventional types of lifting, loading, and handling equipment can handle the system.

      (3) Lifting and tie-down points conform to appropriate size, strength, and markings standards.

      (4) System is adaptable to prescribed forms of transport (including surface, sea, and air, as applicable).

      (5) Equipment and personnel can be moved with ease from the ships to shore assembly points in logistics-over-the-shore operations (as applicable).

      (6) Transport and storage-handling damages are limited effectively by packaging.

I. ILS Element - FAC

1. The FAC logistics element is composed of a variety of planning activities, all of which are directed toward ensuring that all required permanent or semi permanent operating and support FAC (for instance, training, field and depot maintenance, storage, operational, and testing) are available concurrently with system fielding. Planning must be comprehensive and include the need for new construction as well as modifications to existing FAC. Facility construction can take from 5 to 7 years from concept formulation to user occupancy. It also includes studies to define and establish impacts on life cycle cost, funding requirements, facility locations and improvements, space requirements, environmental impacts, duration or frequency of use, safety and health standards requirements, and security restrictions. Also included are any utility requirements, for both fixed and mobile FAC, with emphasis on limiting requirements of scarce or unique resources.
2. The FAC element is a consideration in the SYE process previously discussed.
3. FAC are evaluated to determine whether the following areas have been defined and satisfied:
   a. FAC requirements in terms of space, volume, capital equipment, and utilities necessary for system operation and maintenance.
   b. Environmental system requirements (for example, temperature, humidity, and dust control) associated with operations, maintenance, and storage FAC.

J. ILS Element - Computer Resources Support

1. CRS includes the FAC, hardware, software, documentation, manpower, and personnel needed to operate and support computer systems and the software within those systems. Computer resources include both stand-alone and embedded systems. This element is usually planned, developed, implemented, and monitored by a Computer Resources Working Group (CRWG) or Computer Resources Integrated Product Team that documents the approach and tracks progress via a Computer Resources Life-Cycle Management Plan (CRLCMP). Developers will need to ensure that planning actions and strategies contained in the ILSP and CRLCMP are complementary and that CRS for the operational software, and ATE software, support software, is available where and when needed.
2. The CRS element is a consideration in the SYE process previously discussed.
3. This element supports both embedded computer system s and the automatic test equipment that provide support for the end item. In general, evaluation of this area addresses the adequacy of the hardware and the accuracy, documentation, and maintenance of computer software routines. Built-in test routines programmed into the software of a complex device, such as a computerized aircraft fire control system, are also assessed in this evaluation element

K. ILS Element - Technical Data

1. Technical Data and Technical Publications consist of scientific or technical information necessary to translate system requirements into discrete engineering and logistics support

documentation. Technical data is used in the development of repair manuals, maintenance manuals, user manuals, and other documents that are used to operate or support the system. Technical data includes, but may not be limited to:

a. Technical manuals.

b. Technical and supply bulletins.

c. Transportability guidance technical manuals.

d. Maintenance expenditure limits and calibration procedures.

e. Repair parts and tools lists.

f. Maintenance allocation charts.

g. Preventive maintenance instructions.

h. Drawings/specifications/technical data packages.

i. Software documentation.

j. Provisioning documentation.

k. Depot maintenance work requirements.

l. Identification lists.

m. Component lists.

n. Product support data.

o. Flight safety critical PL for aircraft.

p. Lifting and tie down pamphlet/references.

q. Hazardous Material documentation.

2. Technical data is evaluated for accuracy, comprehensiveness, adequacy and usability. Physical demonstration of a maintenance action using the technical publications, MPCs as available, required tools, and other necessary support equipment, is a preferred method for test and verification of technical publications. Prior to validation, the PM/ILSM should establish the appropriate requirements for technical publications (e.g., literacy level, safety/hazard call-outs, delineated lifting levels and maintenance envelopes, etc.) based on HFE/HSI standards.

3. Technical data requirements are considered in the LMI process.

4. Logistics Management Information Overview. LMI comprises the support and support-related engineering and logistics data, generally acquired from contractors, for use in life-cycle logistics management processes such as initial provisioning, cataloging, and item management. It contains information that the CG needs in order to:

   a. conduct logistics planning and analysis,

   b. influence program/design decisions, and

   c. verify that contractor performance meets system supportability requirements.

5. LMI is comprised of both management and support data. Management data includes those data items necessary for configuration control, cost, schedule, contractual data management, program management, and the like. Support data includes technical data required to support life-cycle sustainment planning. It includes SUA documentation; SUS information; general maintenance plans and reports; training and training support data; packaging, packing, handling, and transportation information; FAC data; etc.

6. LMI can be delivered as stand-alone report summaries, integral components of other SYE documentation, or through the use of commercially available logistics support analysis (LSA) tools. Requirements for LMI must be coordinated with data requirements of other program functional elements to minimize redundancies and inconsistencies. Tailoring should be conducted in each phase to correspond to the level of meaningful information available as it relates to design maturity and resource requirements.

7. Roles and Responsibilities. The program office is responsible for managing the acquisition of LMI. Close coordination with CG life-cycle support activities such as SFLC or ALC is critical in order to ensure that the data being developed and delivered as part of the system design and fielding efforts is usable and relevant in sustainment. The cost of data delivery should be a primary consideration. Engineering and logistics functional elements must coordinate and interface to optimize the range and depth of data developed during each phase. A lack of coordination can lead to costly duplication of effort and the creation of ‘islands of information. Other factors to consider when developing LMI deliverable requirements include:

   a. Data requirements for the initial provisioning and subsequent procurement of spare and repair parts.

   b. Technical data needed for design and equipment selection decisions and for life-cycle configuration management and maintenance support.

   c. The level of data required commensurate with the design evolution, to include alignment with key program events such as design, production and test readiness reviews.

8. CG logistics centers and authorized CDMs manage the configuration data and related supply support documentation for all platforms assigned under their cognizance. During acquisition, the program manager manages configuration data and system configuration to ensure the requirements of CG logistics centers and authorized CDMs are satisfied. Platform level configuration and associated technical data shall be managed under a formal CCB process.

9. LMI in the Acquisition Phases. During the early phases of Analyze/Select Phase and Obtain Phase, the design of a system is typically defined at higher-order functional/objective levels. This provides a window for supportability considerations to become formal design factors, through integration with the design parameters as defined in system specifications and other programmatic documentation, the promulgation of supportability design guidance, and the active engagement of logisticians and supportability analysts in the design development effort. A primary means of engineering engagement is the conduct of trade studies and other analyses. LMI provides the technical input, and environment, by which these studies and analyses are conducted.

The early data and analytical efforts provide the initial supportability baseline through which progressively more detailed efforts take place as a core component of design evolution.

Example of early-phase LMI/SUE opportunities include determining early SUE requirements (e.g., built-in test vs. automatic test equipment) and analyzing organic support versus interim or life-cycle contractor support or extended warranties. It is also possible at a fairly early point in the acquisition effort to identify high level maintenance and provisioning requirements for tools and test equipment, which can assist in the development of budgets and funding levels for later phases. Without proper LMI, neither contractors nor the CG can credibly perform the required supportability analyses, and the validity and importance of life-cycle support considerations in the evolving program design can be greatly diminished.

10. In addition to being managed as an integrated data set using logistics data management and analysis tools, LMI is usually reported in the form of summaries such as:
    a. Maintenance Planning Summary.
    b. Repair Summary.
    c. Support and Test Equipment Summary.
    d. Supply Support Summary.
    e. Manpower, Personnel, and Training Summary.
    f. FAC Requirements Summary.
    g. PHS&T Summary.
11. These summaries provide maintenance planning information that may be used to develop initial fielding plans for the end item's support structure. These summaries may also be used to verify that the maintenance actions and support structure are aligned with CG capabilities, requirements and maintenance concepts. The information contained within these summaries is compared against system components to the level of detail specified on contract. The repairable items should be identified within the hierarchy of the end item, broken down based upon a hierarchically structured configuration control method. LMI summaries may (for example) identify preventive and corrective maintenance actions and the required spares and support equipment. These summaries may also be used to provide supporting information that justifies the need for each maintenance action; for example, elapsed time of maintenance actions, task frequency, failure rate of an item, and mean time to repair (MTTR) an item.
12. Programs that acquire COTS or NDI items should find information regarding necessary maintenance actions readily accessible, although it will need to be reviewed against the planned CG application of the item. From this information, manpower, skill level, and training projections can be made. In modification programs, high level SM&R coding may occur during the earlier stages of SUA. FAC summaries are especially relevant during the early phases because of the long lead-times normally associated with FAC development or upgrade.

13. The later phases of Produce/Deploy/Support usually allow less design influence from a logistics standpoint, but provide detailed information concerning such things as preventive and corrective maintenance actions and the required spares and support equipment. LMI can be used to review contractor specified maintenance actions and ensure they are aligned with the maintenance concept. LMI is critical to both developing approved CG life-cycle support data and to providing accurate LCCE. LMI data will support specific equipment selection, configuration decisions, manpower estimating and assignment (e.g., crew workloads analysis), and many other critical functions as the system design solidifies and production begins in earnest. LMI is also applicable to fielded systems as an analysis tool when:

    a. a major increase or decrease in an item's cost or failure rate occurs,

    b. an engineering change proposal is submitted,

    c. a change from total contractor support to organic support is under consideration, or

    d. a performance review of a fielded system is scheduled.

14. As CG support databases evolve and the CG Logistics Information Management System (CG-LIMS) is fielded, acquisition LMI data will be maintained for life-cycle management functions such as reliability assessment and cost-performance analysis.

Chapter 6 - Configuration Management and Other Logistics Considerations

A. Overview. The chapter describes the Configuration Management (CM) process and other logistics considerations that are in addition to the traditional 10 ILS elements.

B. Configuration Management Overview. This section provides an overview of the CM process, defines configuration identification, provides general guidance on the configuration control process, the importance of configuration status accounting, and provides a brief explanation of configuration verification and audit. CM is a comprehensive management and planning function applicable to a configuration item's acquisition and sustainment life cycle. The configuration documentation developed throughout the life cycle phases ensure configuration conforms to clear, concise and valid requirements generated from applicable sources (MNS, ORD, applicable laws and regulations, etc.). From a CM perspective to be effective CM objectives have to align with Program objectives. Therefore, coordination among the plan, Programmatic plan and Master Schedule is required.

The CM process applies sound business practices to manage the configuration for materiel items, processes, and configuration documentation to include design data, technical data, and supporting digital data files. The process involves interaction among CG and supporting activities (government and/or contractor) performing functions such as SYE, logistics, testing, contracting, and manufacturing. It is best accomplished in an IPT environment consistent with the program infrastructure and concept of operations. The CM process consists of four phases (configuration identification, configuration control configuration status accounting, and configuration verification and audits)

1. Configuration Identification. Configuration identification is the selection and designation of Configuration Items (CIs) - generally, "maintenance or logistics-worthy" items- and the assignment of formal identifiers to technical documentation comprising the configuration baselines for the system and associated interfaces. Ultimately, system CIs are aggregated into specific baselines, including in sequence the functional, allocated and product baselines.

2. Configuration Control. Configuration control is the systemic proposal, justification, evaluation, coordination, and approval or disapproval of proposed baseline changes, including monitoring and managing the implementation of approved changes. The configuration control process manages the configuration baselines that result from the configuration identification process. The types and levels of documentation subject to CG configuration control authority are defined in the SOW. At an agreed-to point in the development process, the CG accepts configuration control responsibilities and establishes a Configuration Control Board (CCB). This will typically take place after a major design lockdown event such as CDR.

   Effective configuration control requires the management of changes to the established baselines. Requests for engineering changes are received from CG technical, operational, and contract personnel and requests for Engineering Change Proposals (ECPs) are sent to the contractors. Additionally, ECPs and requests for deviations can also be initiated by contractor personnel. After disciplined assessment of impact, cost, and risk by the CG CCB, disapproval or approval of beneficial changes and the necessary authorization and direction for change implementation are provided to

contractors through the contractual process and to impacted CG activities through appropriate channels.

Industry sometimes carries out the system life-cycle support functions under performance-based arrangements. The contractor is empowered to develop support solutions so long as performance metrics are achieved. Consequently, it is possible that total contractor CM, including configuration control, may be applied in some acquisitions. In most cases, however, the CG will retain the configuration control function.

The CCB is typically staffed by representatives from the respective system development teams, including the ILSM. CG CCBs review all proposed configuration changes and deviations. Many times, authority is delegated from the PM to the PRO Commander to approve minor changes or deviations within the scope specifically identified by the PM concerning cost, schedule and performance or the product baseline information. In some instances, approval of the configuration changes or deviations may be delegated to the contractor, at the PM's discretion. Under the change authority delegated to the contractor by the CG, the contractor evaluates changes that impact the design solution of the item's performance requirements. These changes will not impact the overall system performance requirements.

3. Configuration Status Accounting (CSA). CSA provides visibility into status and configuration information concerning the product and its documentation. In essence, CSA is the recording, reporting and maintenance of all data needed to effectively manage CIs and baselines through the life cycle. CSA tracks changes to the CI and its associated documentation, i.e., it serves as both the current configuration and configuration history repository. Most effective CSA programs establish and maintain well-structured transaction databases with the formal assignment of Configuration Data Managers (CDMs) who have a central authority to control the CSA for their respective CIs.

   The Configuration Status Accounting System (CSAS) documents the functional, allocated, and product baselines, all proposed configuration changes to these baselines, all proposed deviations to configuration baselines, the approval/disapproval status of all proposed configuration changes/deviations, implementation status of all approved configuration changes, and the specific applicability of all approved deviations. This results in documentation of the configuration of each item that is produced.

4. Configuration Validation and Audits. Baseline data must be confirmed and maintained through rigorous inspection to ensure its accuracy and validity. Configuration verifications/validations and audits employ the following data types (among others) at appropriate points in the development and operational sustainment cycles:

   a. Configuration documentation for configuration identification.

   b. The results of product testing.

   c. The physical hardware or software product or its representation.

   d. Manufacturing instructions.

   e. Maintenance and modernization records.

This data is used to verify that the product's performance requirements have been achieved by the product design, and that the product design has been accurately documented in configuration and technical documentation and the CSA database. The process also includes verifying the incorporation of approved engineering changes. Configuration verification should be an embedded function of the contractor's process for creating and modifying the product, but verification and validation requirements must be included in the SOW and flowed to sub-system vendors as appropriate.

Initial functional baseline validation efforts should be reconfirmed by physical validations of the as-built/as-installed system CIs. In lieu of 100 percent physical inspection, the CG performs physical spot check inspections in certain instances for follow-on systems. Successful completion of verification and audit activities results in a verified product and documentation set that may be confidently considered a product baseline, as well as a validated process that will maintain the consistency of product definition to associated documentation. After fielding, overhauls and similar maintenance and modernization availabilities should include the conduct of physical validations to ensure baseline CSA data remains accurate throughout the life-cycle.

C. Other Logistics Considerations. While logisticians have traditionally used the traditional ILS elements, there are other logistics considerations that should be considered. The following is a list of defined elements that are sometimes used in an acquisition. However, all of these elements should be considered in addition to the traditional ten logistics elements:

1. Systems engineering is the application of diverse scientific and engineering disciplines to transform an operational need into an asset which is operationally suitable and effective while meeting project cost, schedule, and technical performance objectives. It is further discussed in this chapter.
2. CM is the disciplined process for establishing and maintaining consistency of an asset's performance, functional and physical attributes with its requirements, design and operational information throughout its life cycle and is an integral part of the SYE process. CM is further discussed in this chapter.
3. ILS, as previously discussed, is the coordinated management and application of all the logistics elements needed for successful operational performance and maintenance of a system or equipment through its entire lifetime, including disposal.
4. SUA are a wide range of related analyses that should be conducted within the SYE process. The goals of SUA are to ensure that supportability is included as a system performance requirement and to ensure that the system is concurrently developed or acquired with the optimal support system and infrastructure.
5. Reliability, Availability, and Maintainability (RAM). Reliability is the probability that an item will perform its intended function for a specified interval under stated conditions. Simply stated, it is how long the system can work. Availability is defined as the probability that an item is in an operable and committable state at the start of a mission when the mission is called for at a random point in time. Maintainability is the probability that if prescribed procedures and resources are used, an item will be retained in, or restored to, a specific condition within a given period.

6. DMSMS is the loss or impending loss of manufacturers or suppliers of critical items and raw materials due to discontinuance of production. This is also known as Obsolescence Management.
7. Standardization (STD) provides for common usage of equipment, components, parts, and materials to promote commonality among assets. It maximizes the use of non-developmental items, standard parts, reliable parts, common publications, manuals and training aids, common materials and processes to lower cost, reduce down-time, facilitate interchangeability, and promote commonality. Standardization reduces the support burden by having fewer types of parts to purchase and stock.
8. Parts Management (PMT) is a process designed to reduce the total cost of ownership and increase logistics readiness, promote interoperability, enhance the interchangeability, reliability, and availability of parts, minimize DMSMS impacts, assist in meeting end item performance goals, assist with parts selection and qualification procedures, minimize the proliferation of parts and drawings through standardization. Its basic goal is to reduce the number of different types of parts in assets and the supply system.
9. Human Factors Engineering (HFE) is the systematic application to system design and engineering of relevant factors concerning human characteristics. These factors include skill capabilities; performance; anthropometric data; biomedical factors; and training implications to system development, design, acquisition strategy, and manning. It is further discussed in this chapter.
10. Systems Safety (SYS) ensures that all systems, subsystems, and their interfaces operate effectively, without sustaining failures or jeopardizing the safety and health of operators, maintainers, and system mission is a significant acquisition challenge.
11. Health Hazards (HH) addresses the design features and operating characteristics of a system that create significant risks of bodily injury or death. Along with safety hazards, an assessment of health hazards is necessary to determine risk reduction or mitigation. HH is further discussed in this chapter.
12. Personnel Survivability (SSv) and Habitability addresses the characteristics of a system that can reduce fratricide, detectability, and probability of being attacked, as well as minimize system damage, personnel injury, and cognitive and physical fatigue. It is further discussed in this chapter.
13. Environment, Safety, and Occupational Health (ESOH) is a multi-discipline area, which takes into account pollution prevention, compliance, conservation, restoration, munitions response, safety, occupational health, environmental health, explosives safety, fire and emergency services, pest management, environmental technology, and international activities. It is an important factor in sustaining the readiness of the CG by cost-effectively maintaining all installations and assets through promotion of safety, protection of human health, and protection and restoration of the environment.
14. Quality Assurance (QA) is the process of providing evidence needed to establish quality in work, and establish that activities that require good quality are being performed effectively. It is all those planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given

requirements for quality.

15. Automatic Identification Technology (AIT) is the use of technology to support the management of inventory (e.g., Radio Frequency Identification).

Chapter 7 – Transition

During acquisition, there are three key issues that the acquisition logistician must consider. The three issues are post-production support, fielding, and disposal. This chapter discusses all three issues.

A. Post-Production Overview

1. Post-production support planning includes the management and support activities necessary to ensure attainment of readiness and sustainability objectives after cessation of the production phase for all units of a system. AC&I funds are used for an asset until the production line stops and all assets are fielded. After production ceases, an asset is supported by Operating Expenses (OE) funding. However, AC&I and OE funding determinations for assets that are fielded, will be consistent with the current CG financial policies. Post-production support is necessary to ensure continuity of the support concepts established during the materiel development and acquisition process. It is required for the documentation of resource and management actions necessary to ensure the sustainment of system readiness objectives and requirements and for logistics support at all levels following the completion of production. Post-production support planning should be based upon compliance with the support requirements and concepts established during the Obtain Phase. The following Figure 7- demonstrates how AC&I funding decreases as the item approaches fielding.

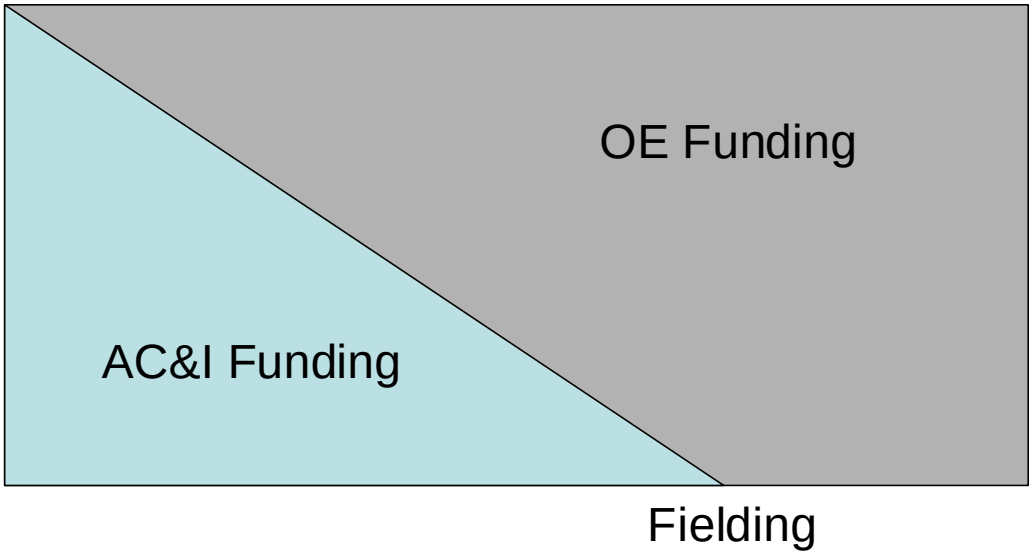


Figure 7-1. AC&I/OE Funding Changes

2. Post-production support planning is part of the SUE function and is reflected in the early trade-offs considered in the Obtain Phase. Post-production support planning starts with supportability analyses to identify technological opportunities and evaluate design opportunities for improvement of supportability characteristics in new systems. The goal of these analyses is to achieve effective and economical support throughout the expected service life of the materiel system.

3. The objective of operational and post-production support planning is to maintain the system in a ready condition throughout its operational phase within OE cost levels documented in LCC estimates and acquisition program baselines.
4. The PM is charged with the responsibility for post-production planning. Post-production support planning should be a joint effort involving the CG and the system development contractor. Requirements for post-production support must be placed in the statement of work for the contractor, to include post-production support considerations in source selection trade-off activities. The PM and ILS manager should document the status of post-production support planning in the ILSP and Project Transition Plan (PTP). For major systems projects, the PM should address post-production support planning during logistics assessment portion of the ADE-4 brief.
5. The transition plan may include:
   a. Organizational roles and responsibilities, including Government (by activity) and contractor.
   b. System readiness objectives in the post-production time frame.
   c. Known or potential post-production support problem areas and associated mitigation measures.
   d. An identification and assessment of the potential impacts of production phase out, technological change, and obsolescence on the materiel system and its support infrastructure.
   e. Post-production support strategies.
   f. Support strategy if the system life-cycle is extended beyond the original projection (e.g., service life extension).
   g. Provisions for utilization, disposition and storage of Government-owned tools, equipment and contractor developed tools, test equipment, and so forth.
   h. The advisability of purchasing major investment items from the manufacturer, such as major manufacturing structures, forgings and castings, insurance items, proprietary data rights, raw materials, technical data, drawings, tooling, etc., to support post-production competitive procurements or organic support requirements.
   i. Alternative post-production support strategies to accommodate obsolescence or production phase out, to include.
      (1) Second sourcing.
      (2) Support buyouts.
      (3) Pre-planned product improvement (p3i) initiatives.
      (4) Modernization through sparing.
      (5) Interim or life-cycle contractor logistics support.
      (6) Organic support.
      (7) Substitution of new technologies.

(8) Market research techniques.

6. The transition plan should be updated prior to the production decision, at production phase-out, and at any other time a significant change has occurred in the anticipated support time frame.

7. The PM should continue the post-production support process throughout the Produce/Deploy/Support Phase after fielding by utilizing operational support data to optimize the support structure and reduce total ownership costs.

8. Planning for post-production support begins in the Analyze/Select Phase, with much of the detailed planning and execution starting in the Obtain Phase, when components and manufacturers of components are selected. Interface specifications should be designed to promote open system architecture, permitting flexibility in accomplishing future updates and technology insertion. The analysis effort should be performed by or under the direction of an appropriate IPT, and the CG members should perform any functions that are beyond the scope of the acquisition contracts. Items that are single-sourced or those for which the Government cannot obtain data rights should be identified; and plans should be made for appropriate long-term support arrangements, e.g., organic support capability, production- line buy-out, or contractor logistics support agreements.

9. Despite the best planning efforts, challenges are certain to arise during the post-production period. Support problems such as diminishing or inadequate sources of supply or repair should be analyzed to determine alternative solutions, the costs and associated risks involved, and an estimate of the funding and actions required to implement preferred solutions. Historically, system service lives have been extended for periods far beyond those originally planned. As a consequence, many original suppliers are no longer in business or are unwilling to accept contracts for components that no longer have a robust market. Therefore, new sources of support will necessarily have to be established, through flexible manufacturing or other means. Some of the impacted components can typically be replaced through the use of performance specifications ("form, fit and function"), but others will likely require the application of detailed specifications to properly function in major systems designed in the earlier era of detailed specifications. Opportunities to reduce system life-cycle cost or improve reliability through technology insertion should be sought. In general, succeeding generations of technology offer both improved performance and improved supportability.

10. Relying on a single industrial source for critical support may increase risk in the cost and availability of spare and repair parts. The logistics manager should make it a point to obtain technical data, drawings, tooling, etc., to enable competition for follow-on logistics support. The cost of obtaining this capability should be weighed against the potential benefits of competition, particularly during an extended post-production period. This analysis should include market surveillance to better determine the potential for post-production support issues, and this surveillance should include aftermarket service providers. Detailed component breakout plans, initially stated in the acquisition strategy and subsequently updated and refined, should be consulted.

11. The PM should conduct a post-production support decision meeting prior to the final production run in order to avoid major nonrecurring charges (if follow-on production is

later required) and to update the transition plan based upon the latest data available. The meeting should also explore the advisability of purchasing items from the manufacturer; such items might include manufacturing structures, forgings and castings, insurance items to cover crash/battle damage or fatigue, proprietary data, and raw material.

12. Supply support issues are concerned with continued production and availability of components and parts. Discrete items within the system should be reviewed down to the subcomponent level and national stock number. The following questions should be considered:

    a. Is technical data available at a reasonable cost?

    b. Is design stability a concern?

    c. Is competitive procurement appropriate?

    d. Is the production base adequate?

    e. What proprietary rights, if any, have been declared by the prime or subcontractors?

    f. Are rights in data procurable at a reasonable cost?

    g. What is the life-of-type buy potential and what are the estimated associated costs?

    h. Are repair FAC available?

    i. Is the component critical to system performance?

    j. What is the expected life of the system/subsystem?

    k. Are workaround alternatives available?

    l. Are quality assurance requirements unique, and difficult to duplicate?

    m. Is CLS feasible?

    n. Will failure rates be high enough to justify the sustainment of an organic capability?

    o. Is the system or part replaceable with new technology?

    p. Will pending or potential design changes eliminate the need for the part?

    q. Is an engineering level-of-effort contract appropriate to ensure continued supportability?

    r. What support equipment is required, and what are the associated life-cycle costs?

    s. Is there an adequate post-production support infrastructure in place?

13. Engineering issues are concerned with the adequacy of technical data. The following questions should be considered:

    a. Who has been designated to perform acceptance inspection QUA with regard to technical data?

    b. Will there be adequate field engineering support, CM, and ECP support?

    c. Will there be adequate support to update:

        (1) Technical manuals.

(2) Production drawings.

(3) Technical reports.

(4) Logistics support data/LMI.

(5) Operational and maintenance data.

(6) Will operational experience be considered in changes to the materiel system; that is, are there sufficient performance metrics and associated monitoring mechanisms in place to gather valid and meaningful usage, failure and performance data?

14. Contracting issues are concerned with whether contracting for further production is feasible. The following questions should be considered:

a. Is production rate tooling particularly complex or expensive? Is tooling readily available to procure, or does it include long lead items?

b. Have all cost factors associated with a breakout/competitive procurement decision been considered? Cost elements should encompass added tooling, special test equipment, qualification testing, quality control considerations, rights in data procurement, etc. If performance specifications are applicable, the following additional costs may pertain. cataloging, bin opening, item management, technical data, production and distribution variables, configuration control and engineering requirement management, etc.

c. Are all potential customers included in the production requirements computations?

15. Computer resources support poses its own set of post-production support challenges. The following questions should be considered:

a. Hardware

(1) Will hardware be supportable?

(2) Will mission, objectives and engineering changes be compatible?

(3) Are modifications and upgrades planned, and supportable?

(4) Is the system expandable?

(5) Have open system architecture tenets been applied?

b. Software

(1) Will diagnostic software changes be possible?

(2) Will the organizational structure allow for continuing software update? Has a Software Support Activity (SSA) been assigned?

(3) Will software changes caused by engineering or mission changes be incorporated and accounted for?

(4) Are there any proprietary restrictions?

(5) Have open system architecture tenets been applied?

16. Post-production support planning includes PHS&T elements. The following questions

should be considered:

a. Will shelf-life items be replaceable when they expire? Is there a rigorous shelf-life management effort in place?

b. Have HAZMAT considerations been applied over the life-cycle, including as it relates to maintenance and disposal? Are they adequately documented? Are there any associated unique cost drivers?

c. Will special shipping containers be replaceable/repairable, or are they part of the overall system development and fielding process?

d. Will peculiar manufacturing tools and dies be procured and stored?

17. Training issues are primarily concerned with the supportability of simulators and maintenance trainers and the availability of any required follow-on training. Again, rights in data can be a concern. Also of concern is ensuring careful linkage of upgrades and engineering changes with the baseline training curricula.

18. Maintenance issues primarily concern depot requirements. The following questions should be considered.

a. Will depot overhaul be required in the out-years? If so, does the capability currently exist (FAC, qualifications), and is it organic or contractor?

b. Have provisions been made in program planning and system design to accommodate a service life extension program if required?

c. Will components be available to support the depot overhaul program in the out-years?

d. Is it realistic to co-mingle manufacturing with repair on a single production line?

B. Fielding Overview

1. Fielding is also known as the turnover, hand-off, delivery, fleet introduction, or other term for the initial introduction of a system to operational commands. Included are. deployment planning, execution, and follow-up requirements comprising each of the logistics elements from the Produce/Deploy/Support Phase.

2. The fielding process is designed to deliver newly acquired or modified systems to users who are being or have been trained and equipped to operate and maintain the equipment. All organic or contractor-operated elements of logistics must be in place at appropriate levels at the time of fielding. Although it may seem a straightforward process, fielding is complex and can be costly if not properly managed, including the potential for significant schedule disruptions. When properly planned and executed, fielding can make a major contribution toward mission achievement if planned levels of unit readiness are met, planned costs are not exceeded, and logistics turmoil is minimized. During fielding and throughout operational support, the potential for modifications to the fielded system continues.

3. Prior to actual fielding an asset, a LRR is conducted. LRRs focus on the as-fielded system, including installed subsystems and components, and associated support products and services. As planning for system support has already been accomplished during earlier stages of program development, LRRs are product vice plan-centric, with the

objective of establishing technical accuracy and adequacy of the system support baseline for all assigned mission profiles. The objective of every LRR is to ensure that all valid life-cycle requirements are adequately supported to the advantage of the asset. LRR results permit prioritization of corrective actions based upon their impact to system or platform readiness, as well as the level of effort required to implement each action.

4. A key logistics fielding challenge is providing adequate support to a system when custody of that system shifts from a contractor to a user or operating command. At the transition point, a contractor might augment CG organic logistics capabilities for a range of services. Fielding should not be thought of as simply delivering a system. There is a need for:

   a. Execution of manpower, personnel and training requirements.

   b. Establishment of FAC.

   c. Placement of system support.

   d. Use of contractor support.

   e. Data collection and feedback.

   f. Scheduling.

   g. Identification, allocation and management of funds.

5. As the planning for deployment intensifies the PM and APO works closely together to assist the user interact with working groups and solve problems that arise during deployment. Deployment personnel should be considered for both APO and on-site assignments. Team members or dedicated IPTs may be required for briefing and assisting operational commanders and their staffs. System deployment teams on-site can assist in the checkout of equipment, help perform the hand-off, train unit personnel, and assure that support capabilities are in place. The assistance of contractor personnel is often desirable at this time and should be considered in the planning, to include issuance of associated contractual tasking/contract vehicles.

6. Establishment of a deployment IPT should be considered. The group should, at a minimum, include members from the using and supporting commands. Deployment can involve negotiation of a major agreement, certification by the PM to deliver the system and its support, and certification by the user to prepare for its receipt. The agreement may be an integral part of the plan for deployment as it is negotiated between the two principals and coordinated among the many other participants and/or IPT members. The agreement may involve on-site meetings to coordinate the details of transfer, site planning and inspection, equipment on-site checkout, and similar activities.

7. The first operational units to receive a new system frequently compete for replacement spares with the ongoing production line and with the build-up to support subsequent deployments. Depot-level component repair may also compete with the production line for resources (test equipment, bits and pieces, skilled personnel, etc.). These problems are compounded when the fielded reliability does not meet the planned reliability. The priorities established for satisfying requirements during this time of support and production buildup should be included in the agreement. Leveraging production capabilities, including vendor component support agreements, can actually turn the

production effort to the advantage of the newly fielded system.

8. The following summarizes some of the responsibilities of various organizations associated with the typical system fielding effort:
   a. Project Office
      (1) Establishes a presence in the APO and provides billets to the APO.
      (2) Develops supportability testing assessment.
      (3) Ensures proper delivery of PS&T solutions.
      (4) Provides input to the Sponsor who is responsible for preparing the deployment plan.
      (5) Responds to user needs during break-in period.
      (6) Authorizes augmentation of production efforts to support fielded systems.
   b. Operational Command provides input to deployment plan.
   c. Sponsor arranges for OT&E.
   d. Sponsor plans, programs, and budgets for all operations and maintenance costs associated with fielding a system to operate, maintain, support, and instruct the system.
   e. Human Systems Integration (CG-1B3)
      (1) HSI does not end at asset delivery; elements must be reassessed and adjusted throughout the system lifecycle.
      (2) Gaps between current and future states are identified and mitigated, including their probable impact on the current organization and culture of the Service.
      (3) Actions are taken to close gaps and mitigate negative impacts on the Service based on the cost of implementation versus the cost of not taking action.
      (4) Reviews plans and agreements to ensure HSI elements are taken into account.
      (5) Provides deployment allocations, personnel changes and logistical inputs to the deployment plan.
      (6) Facilitates the orderly transition of PS&T coordination to training managers in FC-51.
   f. Contractor (if required by contract)
      (1) Provides support warranty support.
      (2) Provides interim or life-cycle logistics support services.
9. Planning for fielding begins in the Obtain Phase as an integral part of the SYE process. It intensifies through the Produce/Deploy/Support Phase when the PM prepares a detailed plan for fielding (Deployment Plan). Fielding planning considerations include the timing of deliveries, the order in which new products will be delivered, homeport or site selection (including environmental impact analysis) and formal designation, detailed coordination with associated support activities, contractual augmentation as applicable, and the replacement and disposal of any legacy systems.

10. The purpose of the Deployment Plan is to identify how, when, and where new platforms/systems being acquired will be deployed for operational use. It identifies roles and responsibilities associated with the fielding process, and a fielding/installation schedule consistent with the scheduled delivery of the new systems. It also identifies any costs that will be incurred as part of system fielding, new or modified FAC requirements and staffing issues arising from the fielding process, and (if applicable) plans for disposal of the systems to be replaced.
11. The Deployment Plan must contain realistic lead times that are supported by adequate funds and experienced staff that are capable of rigorous execution. Although a deployment schedule may be established early in the acquisition, subsequent adjustments are likely, particularly for lead systems. In later stages of the acquisition process, the failure to meet a logistics MS can translate either into a costly deployment delay or deployment of a system that cannot meet readiness goals. Either one will result in reduced mission capability.
12. The PM must update and coordinate the Deployment Plan on an ongoing basis to reflect program changes. Dissemination of information to all participants is very important; each change must be coordinated as needed and passed on to every impacted organization. Changes in almost any aspect of the program (ranging from the obvious, such as production schedule changes, to a less obvious change in unit manning requirements or staffing levels) can have an impact on fielding.
13. The acquisition logistics manager must be actively involved in fielding planning. Among the elements that must be considered are the impacts of the introduction of new systems on existing systems and support infrastructures, the identification of sources of personnel to meet the requirements of the new systems, the impact of a program's failure to obtain necessary logistics support resources, and the essential logistics support resource requirements for the operational environment. Fielding should not be thought of as simply delivering equipment but as the delivery of a capability. Early plans for fielding should consider addressing actions to alleviate potential fielding problems impacting performance i.e., risk analysis integrated with the overall system risk management program.

C. <u>Disposal Overview</u>

1. Disposal, including demilitarization, is the final stage in a system's life-cycle. Reference (k) provides related policy and guidance for this stage. Reference (l) provides additional guidance for vessels transferred to foreign nations. At disposal, all military functionality is removed, along with precious metals and any obsolete parts needed for other operational systems or equipment. The item is then sold or destroyed. All system technical data and plans are also disposed of, except for one copy of selected material of historic significance that is sent to the CG Historian. Figure 7-2 shows the life-cycle of a system.

Figure 7-2. System Life-cycle

2. Environmental issues, including pollution, safety and hazardous material concerns, are primary focal points for disposal planners. It is important to plan for disposal during system development, even though most systems are designed for lengthy service lives. Although salvage is of little economic concern, the potential environmental impact of system components is the driver for an early emphasis on disposal planning, particularly as there are often legal issues that may require significant time to resolve associated with this element. Another complexity relates to the variances between local, state and national laws regulatory guidelines.
3. During demilitarization and disposal, the Sponsor ensures that materiel determined to require demilitarization is controlled and that disposal is carried out in a way that minimizes the CG's liability for environmental, safety, security, and health issues. The Sponsor shall consult with CG environmental SMEs to determine the preferred disposal method (e.g., recycling, landfill).
4. The Sponsor is responsible for developing a disposal plan prior to the end of the Operations & Sustainment Stage to identify demilitarization, disposition, and disposal requirements and ensure compliance with legal and regulatory requirements relating to safety, security, and the environment. This plan must be completed far enough in advance to minimize disposal costs. Although there is no specified format, the plan should contain the following elements:
   a. Identity and responsibilities of all organizations.
   b. HAZMAT handling and demilitarization requirements.
   c. Security considerations.
   d. Description of the disposal process and individual activities involved.
   e. System disposal schedule.
   f. Disposal costs and funding.
5. The PLM manages the logistics support for a system during the Operations & Sustainment, and Disposal Stages. This is usually the SFLC for vessels and boats, ALC for aircraft, or a headquarters directorate.
6. Increased environmental awareness and legislation has amplified the complexity and cost of demilitarization and disposal. Early and ongoing identification of disposal issues and potential solutions can help the CG avoid serious consequences at the end of the program's life-cycle.
7. Decisions the PM makes during the acquisition process will influence the environmental impact of demilitarization procedures. Environmental issues associated with the

demilitarization of a system can be more significant than those created during all previous life-cycle phases. Effective planning during the Analyze/Select Phase and the Obtain Phase can minimize hazardous waste generation during demilitarization. As is the case throughout the life-cycle, all demilitarization planning should reflect good business practices. PMs are encouraged to select a demilitarization approach that minimizes program costs while simultaneously minimizing adverse environmental impacts.

Chapter 8 – Templates Process Guide

A. Overview. The preceding chapters identified a great deal of information that must be gathered and analyzed to plan a system's mission support. The CG often tasks contractors to provide the required information and analysis. This chapter summarizes the steps to tailor the preformatted templates for CDRL for use in a SOW to obtain information needed for system mission support planning and execution. Appendix C contains the detailed steps for tailoring the preformatted templates. Appendix D provides a description of all of the available SOW language and CDRL templates. Appendix E contains the preformatted CDRLs. The templates contained in Appendix E must be modified IAW Commandant (CG-9) guidance and program requirements. Appendix F contains a list of the DIDs that are used in the CDRL templates.

B. Tailoring Steps. Appendix E contains CDRLs that can be tailored to match the requirements of a program. There are 5 steps that must be used in developing proposed contractual requirements.

1. The requirements developer must determine that the logistics related information or analyses are required. Obtaining information or analysis from a contractor is expensive and a cost benefit analysis should be developed for each requirement. The developer should be able to readily specify why the analysis or information is required and the impacts if the information is not obtained.
2. After the requirement is substantiated, the developer should consult Commandant (CG-9) policy to determine how the templates should be modified to comply with Commandant (CG-9) direction.
3. The developer should refer to the appropriate SOW language and CDRLs contained in the Template Process Guide as a start in developing contract requirements. The developer must ensure that the contract language and each block in the CDRL meet their program requirements.
4. Because DIDS are continually being updated, the developer should next research the current DIDS using the http://assist.daps.dla.mil/ website. This website contains the current version of all DIDS.
5. Finally, the developer should tailor the language describing the required information or analyses to ensure that the requested information is exactly what the developer requires. Because the CG is writing the requirement, any ambiguity in the contract will be decided against the CG.

Major Systems Acquisition Phases

Project Identification	Need	Analyze/Select	Obtain	Produce/Deploy/Support

Major Mission Support Related Tasks & Deliverables

Analyze/Select

Analyze/Select Objectives: Analyze alternatives & identify resources to close the Coast Guard Mission Performance Gap

Sponsor Representative

Create Operational Requirements Document (ORD)

Update CONOPs

Project Management

Create Alternative Analysis Study Plan

Create Life Cycle Cost (LCC) Estimate

Coordinate development of the Independent Cost Estimate (ICE)

Update Affordability Assessment

Update Exhibit-300 Business Case

Create Project Management Plan (PMP)

Update Acquisition Plan

Create Acquisition Program Baseline

Create Alternative Analysis

Create Configuration Control Board Charter

Create Risk Management Plan

Create Obtain Phase exit criteria (proposed)

Systems Engineering

Create Systems Engineering Life Cycle (SELC) Tailoring Plan

Conduct Analysis of Alternatives Study Plan Review (SPR)

Conduct Market Research to Identify Alternatives

Explore alternatives and assess the major strengths and weaknesses of each in conjunction with the Sponsor

Conduct Technology Readiness Assessments as part of systems engineering management reviews

Conduct System Requirement Review

Assess the continued availability of materials and manufacturing sources for each alternative to ensure long term supportability

Identify major trade-off opportunities for cost, schedule and performance

Conduct the Solutions Engineering Review (SER)

Create Configuration Management Plan

Develop Technology Plan

Create Preliminary Spectrum Supportability Assessment (IT only)

Create System Security Plan (IT only)

Create System Contingency Plan (IT only)

Prepare NTIA Stage 1 Spectrum Certification (IT only)

Initiate the National Environmental Policy Act process

Logistics

Develop Level of Repair Analysis (LORA)

Create Integrated Logistics Support Plan (ILSP)

Develop Personnel Survivability Analysis

Develop Failure Modes and Effects Criticality Analysis (FMECA)

Develop Reliability Centered Maintenance (RCM) analysis

Create Maintenance Planning Summary

Create Repair Summary

Create Support & Test Equipment Summary

Create Supply Support Summary

Create Manpower, Personnel & Training Summary

Create Facilities Requirements Summary

Create Packaging, Handling, Storage & Transportation (PHST) Summary

Begin Post-Production Support planning

Execute Independent Logistics Assessment (ILA)

Initiate Supportability Analysis

Organize the Integrated Logistics Support Management Team

Establish support concept

Initiate Diminishing Manufacturing Sources and Materials Shortages (DMSMS) Planning

Human Systems Integration

Initiate Human Systems Integration (HSI) planning (including Manpower, Personnel, Training, Human Factors Engineering (HFE), System Safety, Survivability, and Habitability)

Initiate studies and analyses for manpower requirements to operate, maintain, support, and instruct the system

Conduct HFE activities and provide guidance for design development

Plan for the development of HSI, HFE and System Safety Program Plans by the contractor. Contact CG-1B3 for format, content & cost estimating.

Identify HSI standards and best practices for requirements development

Perform task analyses on legacy assets and platforms

Research lessons learned with regard to human performance issues and physiological limitations

Develop notional Performance, Support, and Training (PS&T) plans including initial training in detail as well as interim and sustainment training

Develop PS&T evaluation plans

Ensure PS&T requirements development strategy is aligned with latest guidance from Coast Guard Training System SOP

Test & Evaluation

Develop test strategy

Create Test & Evaluation (T&E) Master Plan

Establish Test Management Oversight Team

Initiate Developmental Test and Evaluation and Operational Test and Evaluation planning

Major Mission Support Related Tasks & Deliverables	Major Systems Acquisition Phases				
	Project Identification	***Need***	***Analyze/Select***	***Obtain***	***Produce/Deploy/Support***
	Project Identification		***Need***		
	Identification Phase Objective: Identify Coast Guard Mission Capability Gap	**<u>Systems Engineering</u>** Initiate integration with Technical Authorities	**Need Phase Objective: Validate need & define problem**	**<u>Human Systems Integration</u>** Develop staffing predictions Develop strategy for acquiring long lead time, high dollar training aids prior to delivery of first asset	
	<u>Sponsor Representative</u> Create Operational Analyses Create Mission Analysis Report (MAR) Create Preliminary Affordability Assessment Create Preliminary Mission Needs Statement (P-MNS)	**<u>Human Systems Integration</u>** Describe human performance gaps, safety issues & user environments	**<u>Sponsor Representative</u>** Create Concept of Operations (CONOPs) Create Mission Needs Statement Create Analyze/Select Phase exit criteria Create OMB Exhibit-300 Business Case (if appropriate) Prepare a Resource Proposal for the initial project funding & staffing **<u>Project Management</u>** Create Capability Development Plan Create Initial Acquisition Plan (if required) Create Affordability Assessment	Define human performance initiatives Define notional Performance Support & Training (PS&T) needs Submit Requests for Analyses (RFAs) as needed to identify PS&T requirements Develop strategy for conducting Human Performance Training (HPT) analyses Initiate Manpower Estimate Report using CG-1B3 format Create Manpower Estimate Report	

Major Mission Support Related Tasks & Deliverables

Major Systems Acquisition Phases				
Project Identification	*Need*	*Analyze/Select*	*Obtain*	*Produce/Deploy/Support*
Obtain				
Obtain Phase Objective: Demonstrate the feasibility of the preferred alternative to fill the Coast Guard Mission performance gap				
	Systems Engineering	**Logistics**	**Human Systems Integration**	
	Refine and mature preliminary design and conduct Preliminary Design Review (PDR)	Update Level of Repair Analysis (LORA)	Ensure implementation & execution of the HSI, Human Factors Engineering (HFE) & System Safety Program Plans	
	Conduct Critical Design Review (CDR)	Update ILSP	Ensure the requirement for the HSI, HFE and System Safety Program Plans are incorporated in the contract. Contact CG-1B3 for format & content & include CG-1B3 as a member of RFP development team.	
	Conduct Production Readiness Review (PRR)	Provide logistics support for Operational Test & Evaluation	Provide human performance and safety data and analysis for design implications	
	Document completion of PDR and CDR (memo to CG-9 with CG-1, CG-4, CG-6 concurrence as Technical Authorities)	Train initial crew, maintenance personnel, and future instructors	Update studies and analyses for manpower requirements to operate, maintain, support and instruct the system	
Sponsor Representative				
Initiate development of the requirements for sustainment resources, both money and personnel	Finalize planned technology insertions	Perform fitting out activities	Develop task lists and sequence	
Develop the sustainment Resource Proposal, if appropriate	Accomplish Functional Configuration Audit	Design the logistics support system	Perform simulation and prototyping	
Create Operational Test Report	Create Systems Engineering Life Cycle	Create Use Study	Determine staffing and training needs	
Create Deployment Plan	Establish Configuration Control Board (CCB)	Develop an Analysis of Comparative Systems	Determine and evaluate cognitive and physical workload	
	Prepare NTIA Stage 2, 3 & 4 Spectrum Certification (IT only)	Evaluation of Technical Approaches/Opportunities	Develop preliminary prediction of human and system performance	
	Create System Security Plan (IT only)	Develop Trade-off Studies	Support test and evaluation for validation and verification of human performance and safety requirements	
Project Management				
Prepare the Resource Proposal and the necessary budget documentation including updated OMB Business Case Exhibit-300s to support the project as a line item in Coast Guard budget requests	Create System Contingency Plan (IT only)	Create Maintenance Planning Analysis	Validate manpower and training requirements meet system needs to operate, maintain, support and instruct the system	
Revalidate the MNS, CONOP, ORD, Acquisition Program Baseline, and Affordability Assessment	Update Environmental Planning	Create Repair Analysis	Programmatic Environment, Safety and Occupational Health Evaluation (PESHE)	
Developmental Test Report		Create Support and Test Equipment Analysis		
Create Security Assessment Report		Create Supply Support Analysis	**Test & Evaluation**	
Create Produce/Deploy/Support Phase exit criteria (proposed)		Create Manpower, Personnel and Training Analysis	Determine if the capability meets established ORD performance thresholds	
Update Analysis of Alternatives		Create Facilities Analysis	Conduct Security Test & Evaluation, including testing, evaluating, and verifying the IT security controls (IT only)	
Update the APB with specific Cost, Schedule and Performance objectives for Discrete Segments (if appropriate)		Create Packaging, Handling, Storage & Transportation (PHST) Analysis	Conduct a Preliminary Acceptance Trial or First Article Test, if applicable	
Update the Acquisition Plan		Create Post-Production Supportability Analysis	Complete Developmental Test & Evaluation and subsequent Report	
Update the LCCE		Update Failure Modes and Effects Criticality Analysis (FMECA)	Conduct Test Readiness Review to confirm readiness for OT&E	
		Update Reliability Centered Maintenance (RCM) analysis	Conduct Operational Test & Evaluation, including testing, modeling (if appropriate), evaluating, and verifying the support system	
		Complete Logistics Readiness Review (LRR)	Provide Developmental Test & Evaluation and Operational Test & Evaluation test results to the CAE and to DHS JRC/ARB to support the decision to enter the Produce/Deploy/Support Phase at Project Decision	
		Continue DMSMS Planning	Update Test & Equipment (T&E) Master Plan	

Major Mission Support Related Tasks & Deliverables	Major Systems Acquisition Phases				
	Project Identification	***Need***	***Analyze/Select***	***Obtain***	***Produce/Deploy/Support***
	Produce/Deploy/Support				
	Produce/Deploy/Support Objective: Analyze, Produce & Deploy Capabilities; plan and execute support responsibility transition to Mission Support				
		Systems Engineering Conduct Physical Configuration Audit Revalidate Environmental Impact Assessment and update documentation as necessary Support in-service reviews, trade studies, and decision making on modifications, upgrades, and future discrete segments of the system. Interoperability or technology improvements, parts or manufacturing obsolescence, aging systems issues, premature failures, joint or service commonality, may all indicate the need for system upgrade(s)	**Logistics** Update Level of Repair Analysis (LORA) Plan for Provisioning Complete LRR	**Human Systems Integration** Evaluate training concept effectiveness Review and recommend engineering changes for HSI issues Provide usability results and feedback	
	Sponsor Representative Update Deployment Plan Create Post Implementation Review Develop the sustainment Resource Proposal Conduct Post Implementation Review	Create Annual Contingency Plan Test Report (IT only) System Certifying Authority for Authority to Operate decision (IT only) Obtain Frequency Assignments Authorization (IT only) Conduct an annual self assessment of the Information Security controls in accordance with NIST 800-53 (IT only) Conduct a documented exercise of the system Contingency Plan (IT only)	Ensure that the proper personnel, all training facilities and all logistic support material and facilities are in place Monitor continued availability of materials and manufacturing sources Establish interim logistics support, if required Package and distribute all technical data to each unit and logistic support organization Prepare for the hand-off of the operational system	Validate manpower and training requirements meet system needs to operate, maintain, support and instruct the system **Test & Evaluation** Conduct acceptance tests and trials upon delivery of each asset Conduct Follow-on DT&E and OT&E, as necessary	
	Project Management Continue Operational Analysis Create & Execute Project Transition Plan (PTP) The acquisition project continues to manage the resolution of warranty claims until the end of the warranty period Operating Expense (OE) funding for operations and maintenance is updated		Update ILSP The Product Line Manager implements the planned Integrated Logistics Support (ILS) strategies and planning, maintains and improves the processes contained in the ILSP, implements Diminishing Manufacturing Sources and Material Shortages management, and applies and replenishes the ILS resources that have been acquired to support the new system in sustained operation		

Non-Major Systems Acquisition Phases

Analyze/Select	Obtain	Produce/Deploy/Support

Major Mission Support Related Tasks & Deliverables

Obtain

Phase Objective is to acquire and test the first article and ensure mission support is ready for implementation

Sponsor Representative

Identify requirements for sustainment resources, both money and personnel
Develop/update the sustainment Resource Proposal, if appropriate
Create Operational Test Report
Create Deployment Plan (if needed)

Project Management

Update the Resource Proposal and the necessary budget documentation including updated OMB Business Case Exhibit-300s to support the project as a line item in Coast Guard budget requests

Developmental Test and Evaluation Report

Document completion of PDR and CDR (memo to CG-9 with CG-1, CG-4, CG-6 concurrence as Technical Authorities)
Document completion of PRR

Systems Engineering

Evaluate whether proposal alternative can effectively meet the functional requirements

Refine and mature preliminary design and conduct Preliminary Design Review (PDR)

Analyze capability design documentation, user manuals, capability specifications, and other documentation to determine the degree the capability performs its intended purpose
Conduct Critical Design Review (CDR)

Conduct Operational Test Readiness Review

Conduct Production Readiness Review (PRR)

Complete production design specifications
Accomplish Functional Configuration Audit

Create Systems Engineering Life Cycle

Establish Configuration Control Board (CCB)

Update Environmental Planning

Create Security Assessment Report

Implement project configuration management program

Logistics

Update Level of Repair Analysis (LORA)

Update ILSP/EILSP
Provide logistics support for Operational Test & Evaluation
Train initial crew, maintenance personnel, and future instructors
Perform fitting out activities

Design the logistics support system

Create Use Study
Develop an Analysis of Comparative Systems Evaluation of Technical Approaches/Opportunities
Develop Trade-off Studies
Create Maintenance Planning Analysis
Create Repair Analysis
Create Support and Test Equipment Analysis
Create Supply Support Analysis
Create Manpower, Personnel and Training Analysis
Create Facilities Analysis
Create Packaging, Handling, Storage & Transportation (PHS&T) Analysis
Create Post-Production Supportability Analysis

Update Failure Modes and Effects Criticality Analysis (FMECA)
Update Reliability Centered Maintenance (RCM) analysis
Complete Logistics Readiness Review (LRR)
Continue DMSMS Planning

Human Systems Integration

Ensure implementation & execution of the HSI, Human Factors Engineering (HFE) & System Safety Program Plans
Ensure the requirement for the HSI, HFE and System Safety Program Plans are incorporated in the contract. Contact CG-1B3 for format & content & include CG-1B3 as a member of RFP development team.
Provide human performance and safety data and analysis for design implications

Update studies and analyses for manpower requirements to operate, maintain, support and instruct the system
Develop task lists and sequence

Perform simulation and prototyping

Determine staffing and training needs
Determine and evaluate cognitive and physical workload
Develop preliminary prediction of human and system performance
Support test and evaluation for validation and verification of human performance and safety requirements
Validate manpower and training requirements meet system needs to operate, maintain, support and instruct the system

Programmatic Environment, Safety and Occupational Health Evaluation (PESHE)

Test & Evaluation

Determine if the capability meets established ORD performance thresholds
Conduct a Preliminary Acceptance Trial or First Article Test, if applicable
Create Developmental Test & Evaluation Plan
Complete Developmental Test & Evaluation and subsequent Report
Create Operational Test & Evaluation Plan

Conduct Test Readiness Review to confirm readiness for OT&E
Conduct Operational Test & Evaluation, including testing, modeling (if appropriate), evaluating, and verifying the support system
Complete Low Rate Initial Production (LRIP)

Non-Major Systems Acquisition Phases

Analyze/Select	Obtain	Produce/Deploy/Support

Major Mission Support Related Tasks & Deliverables

Analyze/Select

Phase Objective is to identify operational requirements, position the project for successful execution and begin mission support planning

Sponsor Representative
Create Operational Requirements Document (ORD)
Create Concept of Operations (CONOP)

Project Management
Create Alternative Analysis Study Plan

Prepare a Resource Proposal for the initial project funding & staffing

Update Exhibit-300 Business Case
Create Project Management Plan (PMP)

Prepare Acquisition Plan

Develop Acquisition Project Baseline

Systems Engineering
Initiate the National Environmental Policy Act process (if needed)
Assess the continued availability of materials and manufacturing sources for each alternative to ensure long term supportability
Identify major trade-off opportunities for cost, schedule and performance
Conduct the Solutions Engineering Review (SER)
Create Configuration Management Plan
Create Configuration Control Board Charter
Create Systems Engineering Life Cycle (SELC) Tailoring Plan
Evaluate alternatives
Assist with finalizing operational requirements
Conduct market research to identify available alternatives
Explore alternatives and assess the major strengths and weaknesses of each
Create Life Cycle Cost (LCC) Estimate

Logistics
Develop Level of Repair Analysis (LORA)

Create Integrated Logistics Support Plan (ILSP) or Equipment Integrated Logistics Support Plan (EILSP)
Develop Personnel Survivability Analysis

Develop Failure Modes and Effects Criticality Analysis (FMECA)

Develop Reliability Centered Maintenance (RCM) analysis
Create Maintenance Planning Summary

Create Repair Summary

Create Support & Test Equipment Summary

Create Supply Support Summary
Create Manpower, Personnel & Training Summary

Create Facilities Requirements Summary

Create Packaging, Handling, Storage & Transportation (PHS&T) Summary
Begin Post-Production Support planning

Execute Independent Logistics Assessment (ILA)
Initiate Supportability Analysis

Organize the Integrated Logistics Support Management Team

Establish support concept

Initiate Diminishing Manufacturing Sources and Materials Shortages (DMSMS) Planning

Human Systems Integration
Initiate Human Systems Integration (HSI) planning (including Manpower, Personnel, Training, Human Factors Engineering (HFE), System Safety, Survivability, and Habitability)
Initiate studies and analyses for manpower requirements to operate, maintain, support, and instruct the system
Conduct HFE activities and provide guidance for design development
Plan for the development of HSI, HFE and System Safety Program Plans by the contractor. Contact CG-1B3 for format, content & cost estimating.
Identify HSI standards and best practices for requirements development
Perform task analyses on legacy assets and platforms
Research lessons learned with regard to human performance issues and physiological limitations

Develop notional Performance, Support, and Training (PS&T) plans including initial training in detail as well as interim and sustainment training

Develop PS&T evaluation plans
Ensure PS&T requirements development strategy is aligned with latest guidance from CG Training System SOP
Describe human performance gaps, safety issues & user environments
Develop staffing predictions

Develop strategy for acquiring long lead time, high dollar training aids prior to delivery of first asset
Define human performance initiatives

Define notional Performance Support & Training (PS&T) needs
Submit Requests for Analyses (RFAs) as needed to identify PS&T requirements

Develop strategy for conducting Human Performance Training (HPT) analyses
Initiate Manpower Estimate Report using CG-1B3 format
Create Manpower Estimate Report

Test & Evaluation
Develop test strategy
Create Test & Evaluation (T&E) Master Plan

Major Mission Support Related Tasks & Deliverables	Non-Major Systems Acquisition Phases			
	Analyze/Select		*Obtain*	*Produce/Deploy/Support*
	Produce/Deploy/Support			
	Phase Objective is to deliver, field and support production assets			
		Systems Engineering	**Human Systems Integration**	
		Conduct Physical Configuration Audit	Evaluate training concept effectiveness	
		Revalidate Environmental Impact Assessment and update documentation as necessary	Review and recommend engineering changes for HSI issues	
		Support in-service reviews, trade studies, and decision making on modifications, upgrades, and future discrete segments of the system. Interoperability or technology improvements, parts or manufacturing obsolescence, aging systems issues, premature failures, joint or service commonality, may all indicate the need for system upgrade(s)	Provide usability results and feedback	
	Sponsor Representative			
	Update Deployment Plan (if applicable)	Verify and validate production configuration	Validate manpower and training requirements meet system needs to operate, maintain, support and instruct the system	
		Logistics		
	Update the sustainment Resource Proposal	Update Level of Repair Analysis (LORA)	**Test & Evaluation**	
		Plan for Provisioning	Conduct acceptance tests and trials upon delivery of each asset	
		Complete LRR (if needed)	Conduct Follow-on DT&E and OT&E, as necessary	
	Project Management	Ensure that the proper personnel, all training facilities and all logistic support material and facilities are in place		
	Execute production contracts	Monitor continued availability of materials and manufacturing sources		
	Create & Execute Project Transition Plan (PTP) (if needed)	Establish interim logistics support, if required		
	Ensure product meets operational, cost and schedule requirements	Package and distribute all technical data to each unit and logistic support organization		
		Prepare for the hand-off of the operational system		
		Update ILSP/EILSP		
		The Product Line Manager implements the planned Integrated Logistics Support (ILS) strategies and planning, maintains and improves the processes contained in the ILSP/EILSP, implements Diminishing Manufacturing Sources and Material Shortages management, and applies and replenishes the ILS resources that have been acquired to support the new system in sustained operation		

TEMPLATE PROCESS GUIDE

OVERVIEW

This process guide is designed to assist CG teams responsible for planning and establishing support systems for CG assets in developing information for preparing SOW and CDRL.

A fully functioning support system must be in place when the CG fields a new asset. The asset will require trained staff, supplies, FAC, and information technology (IT) support to successfully perform its mission, operate safely, and minimize its lifecycle costs. Although this Guide focuses on the acquisition stage of an asset's lifecycle, decisions made during the acquisition stage will have a major impact upon the asset during its operations and sustainment, and disposal stages. Figure C-1 depicts the three stages of an asset's lifecycle – acquisition, operations and sustainment, and disposal. The team that establishes the asset's support system must design the system so it will be capable of ensuring the readiness of the asset throughout its life.

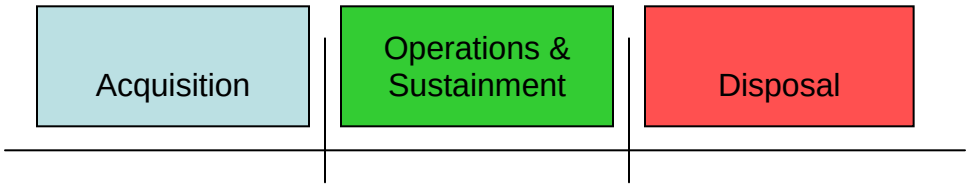


Figure C–1. Three Stages of a Coast Guard Asset's Lifecycle

Readers who require a detailed understanding of the acquisition processes should consult policy and procedures documents issued by Commandant (CG-9). Reference (a) sets the policy for major system acquisitions. Reference (b) prescribes non-major acquisition requirements. Users should work directly with Commandant (CG-9) to ensure they are using the latest guidance.

References (c) and (d) provides guidance on planning mission support for new CG assets.

PURPOSE AND SCOPE

The CG often tasks contractors to provide information and analysis required to properly support CG assets. This Guide describes basic SOW language and preformatted CDRL that can be tailored and used to obtain information needed for system mission support planning and execution.

Every acquisition project and asset is unique, so each team tasked with establishing a new asset's support system must tailor the guidance in this Guide to their specific project and asset. However, this Guide provides the basic elements that can be easily modified by the user to develop a SOW and the necessary CDRLs. The SOW and CDRLs need to be prepared IAW Commandant (CG-9) guidance.

Preparation of a SOW and CDRL to obtain information for mission support planning and execution most often occurs during an acquisition's Analyze/Select and Obtain Phases. Figure C-2 shows the five phases of the Major Systems Acquisition Process and Figure C-3 shows the three phases of the NMAP.

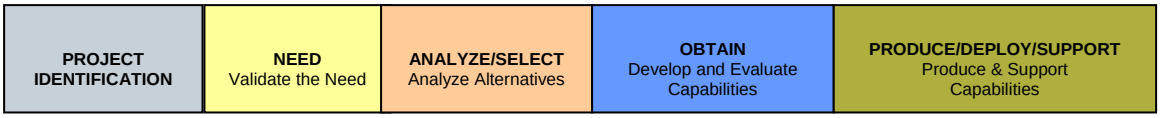


Figure C–2. The Five Phases of the Coast Guard Major Systems Acquisition Process

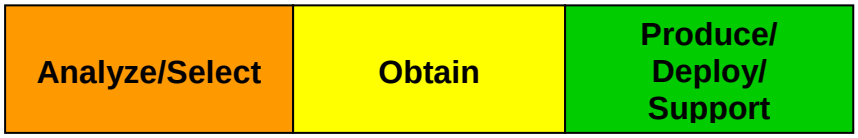


Figure C–3. The Three Phases of the Coast Guard Non-Major Acquisition Process

PROCESS REQUIREMENTS

Experience has shown us that properly prepared solicitations and contracts are key ingredients in the success of acquisition programs. Logistics considerations are a major consideration throughout the acquisition process. They are, therefore, a large part of the solicitation and ultimately the contract. All personnel responsible for designing, developing, and acquiring systems must work together to ensure that logistics needs are adequately covered in contractual documents. In the solicitation the objectives for logistics are to:

a. Integrate logistics needs wherever support may be required.

b. Identify, analyze, and resolve support deficiencies.

c. Systematically identify and evaluate support system alternatives.

d. Manage support acquisition throughout the contracting process.

e. Develop a timely, effective support capability at an economical life cycle cost.

This chapter explains the step-by-step process for identifying and tailoring SOW language and CDRLs. The following steps are required in the process (see Figure C-2 for a process flow chart):

1. Identify requirement. The first step in the preparation process is to identify the logistics information that must be obtained. The logistician must have a clear understanding of what is being contracted for and a reasonable expectation of what a contractor can provide. Because any ambiguities in a contract specification are legally the responsibility of the party that prepares the contract, technical writers must be able to clearly explain the requirement.

2. Specify Purpose of Requirement. Because requests for information from a contractor are usually expensive, a logistician must be able to clearly articulate why the information is needed. Even though information that is obtained after the acquisition process is generally more expensive than information obtained during the acquisition process, obtaining information "just in case" it might later be required is not an effective acquisition strategy. Logisticians must be able to identify why the information is required and what the information will be used for.

3. Justify Need for Requirement. The logistician must be able to justify the need for the requirement by explicitly stating the consequences of not obtaining the information. The justification should be in the form of what the CG will not be able to do if the information is not obtained and how this will affect readiness.

4. Identify CDRL Category. The logistician should identify the appropriate CDRL category based on the ILS element that best describes the logistics requirements. Appendix D provides a description of all the available SOW language and CDRL templates. Table C-1 lists all of the CDRL categories and their locations within Appendix D.

Table C-1. CDRL Descriptions

CDRL Category	Name	Page #
Systems Engineering	SYE	D-1
Configuration Management	CM	D-1
Integrated Logistics Support	ILS	D-3
Supportability Analysis	SUA	D-4
Reliability, Availability & Maintainability	RAM	D-4
Maintenance Planning	MPA	D-4
Supply Support	SUS	D-5
Diminishing Manufacturing Sources and Material Shortages	DMS	D-7
Standardization	STD	D-8
Parts Management	PMT	D-8
Human Systems Integration	HSI	D-8
Manpower and Personnel	MAP	D-9
Training and Training Equipment	TTE	D-9
Human Factors Engineering	HFE	D-10
Systems Safety	SYS	D-11
Health Hazards	HH	D-13
Personnel Survivability	SSv	D-13
Environment, Safety, and Occupational Health	ESOH	D-13
Facilities	FAC	D-14
Computer Resources Support	CRS	D-14
Support Equipment	SUE	D-17
Packaging, Handling, Storage & Transportation	PHS&T	D-19
Quality Assurance	QUA	D-22

5. Locate applicable CDRL. The logistician should locate the CDRL that matches the desired requirement. Appendix E includes sample SOW language and sample CDRLs. Table C-2 lists all of the CDRL categories and their locations within Appendix E.

Table C-2. SOW and CDRL Categories

CDRL Category	Name	Page #
Systems Engineering	SYE	E-6
Configuration Management	CM	E-13
Integrated Logistics Support	ILS	E-33
Supportability Analysis	SUA	E-39
Reliability, Availability & Maintainability	RAM	E-46
Maintenance Planning	MPA	E-54
Supply Support	SUS	E-69
Diminishing Manufacturing Sources and Material Shortages	DMS	E-118
Standardization	STD	E-138
Parts Management	PMT	E-144
Human Systems Integration	HSI	E-149
Manpower and Personnel	MAP	E-151
Training and Training Equipment	TTE	E-163
Human Factors Engineering	HFE	E-182
Systems Safety	SYS	E-189
Health Hazards	HH	E-215
Personnel Survivability	SSv	E-220
Environment, Safety, and Occupational Health	ESOH	E-224
Facilities	FAC	E-231
Computer Resources Support	CRS	E-240
Support Equipment	SUE	E-278
Packaging, Handling, Storage & Transportation	PHS&T	E-301
Quality Assurance	QUA	E-348

6. Review and tailor SOW language. Because each acquisition program is unique, the logistician should review the SOW language in its entirety and tailor the requirement to ensure it exactly meets the program's requirements.

7. Review and tailor sample CDRL. After tailoring the SOW language, the logistician should tailor each block on the CDRL form to ensure the program's objectives and timelines are satisfied.

8. Check ASSIST database for current DIDs. The ASSIST-Online is a robust, comprehensive website providing access to current information associated with military and federal specifications and standards in the management of the Defense Standardization Program (DSP). Managed by the DoD Single Stock Point (DoDSSP), Philadelphia, ASSIST-Online provides public access to standardization documents over the Internet. ASSIST-Online includes many powerful reporting features and an exhaustive collection of both digital and warehouse documents. ASSIST is the official source of DoD specifications and standards. ASSIST-Online provides direct, online access to over 104,000 digital document images in Adobe Portable Document Format (PDF) which may be downloaded to users' local workstations. The web address is http://assist.daps.dla.mil/. To ensure the CDRL form is current, the logistician should check the ASSIST database to locate the current DIDs. Appendix F is a listing of the DIDs used in Appendix E but note that DIDs are frequently being updated.

9. Review Complete Package for Accuracy. After completing the tailoring process, the logistician should review the complete package to ensure all requirements are adequately defined.

10. Ensure Package Complies with Commandant (CG-9) Guidance. For a final check, the logistician should review current Commandant (CG-9) guidance to ensure its compliance with all acquisition requirements.

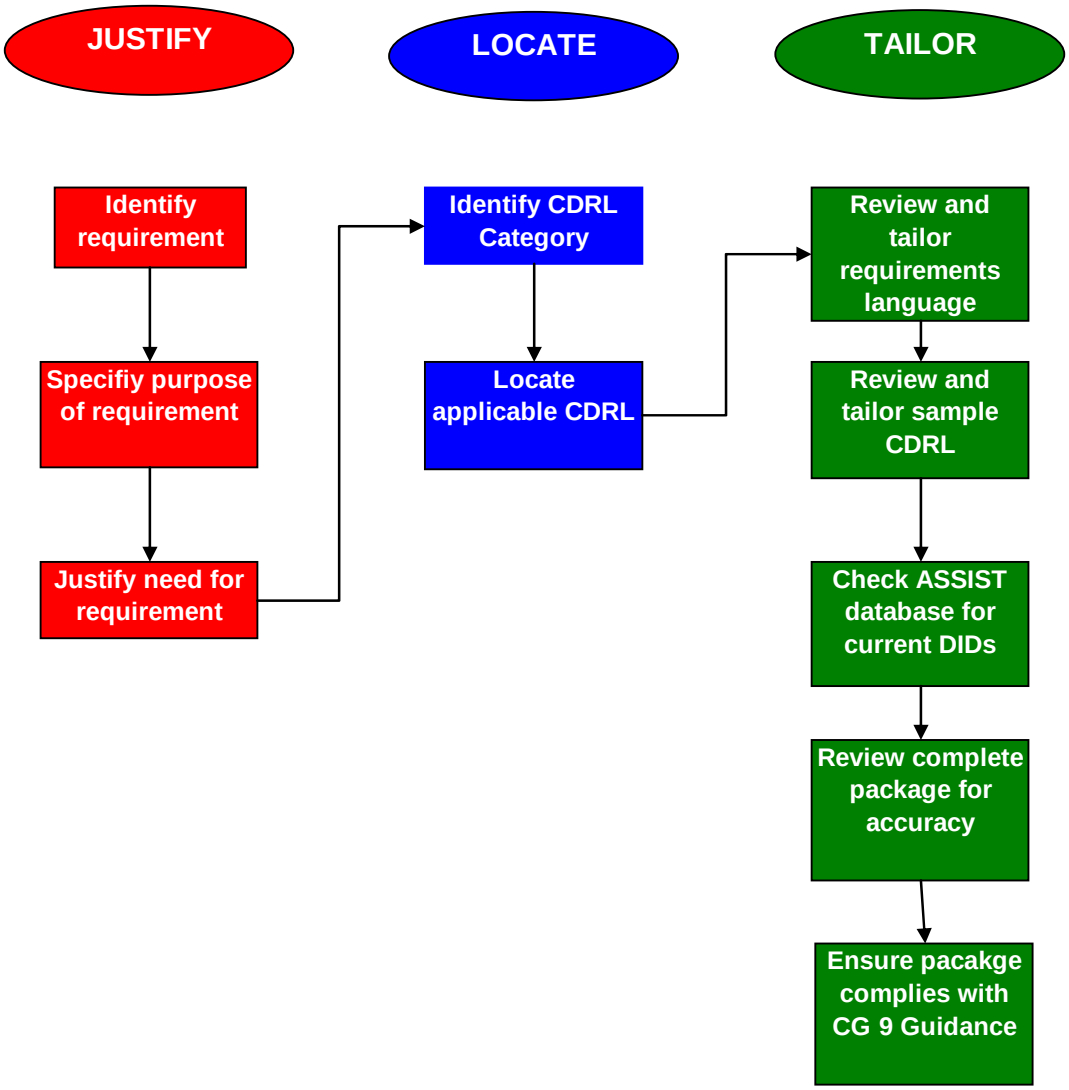


Figure C–4. CDRL and SOW Development Process

CONTRACT DATA REQUIREMENTS LIST CATEGORIES

A. Systems Engineering (SYE)

Description. SYE is the overarching process that a project team applies to transition from a stated capability need to an operationally effective and suitable system. SYE encompasses the application of systems engineering processes across the acquisition life cycle (adapted to all phases) and is intended to be the integrating mechanism for balanced solutions addressing capability needs, design considerations and constraints, supportability requirements, as well as limitations imposed by technology, budget, and schedule.

CDRL List. Appendix E – page E-3

CDRL-SYE-001. System Engineering Management Plan (SEMP). An acquisition project will ensure the contractor develops and implements a SEMP. The SEMP should provide the contractor's integrated approach for:

1. Technical Management
2. System Design
3. Product Realization
4. Technical Evaluation for the [SYSTEM]

CDRL Purpose. The SEMP outlines the contractor's approach to systems engineering and explains their processes for managing the integration of the engineering effort for the system being acquired.

CDRL-SYE-002. An acquisition project will ensure the contractor prepares and submits a Contract Work Breakdown Structure (CWBS). The CWBS should be the basis for the structure of the design reviews.

CDRL Purpose. CWBS. The contractor's WBS identifies the breakdown of their tasks and efforts to accomplish the contract and is tied to cost reporting.

B. Configuration Management (CM)

Description. CM is the disciplined process for establishing and maintaining consistency of a system's performance, functional and physical attributes with its requirements, design and operational information throughout its life cycle and is an integral part of the system engineering process. The CG uses a configuration-based, maintenance driven, centralized supply approach to obtain life-cycle supportability. CM CDRLs specify the specific requirements needed to ensure the CG knows exactly what product it has at any given point in time and what changes have been made to that product over its life cycle. CM can improve performance, reliability, maintainability and interoperability. It can also extend service life; reduce costs; reduce risk and liability; or correct defects. The lack of CM, or its ineffectual implementation, can be expensive and sometimes have such catastrophic consequences as system failure or even loss of life.

The importance of accurately identifying data requirements and obtaining this data as specified is critical to effective CM. There are six functions of an effective CM project. These include:

1. CM Life Cycle Management and Planning (used to determine CM roles and responsibilities, project costs, performance measures and a host of other planning factors).
2. CI (defines and approves product configuration and identifies the items to be controlled).
3. Configuration Control (disciplined methodology for controlling changes and variances),
4. CSA (historical record and data repository of a product's detailed configuration information).
5. Configuration Verification and Audit (ensures the product is performing as requirements specify).
6. Data Management (digital data that is transferable and/or accessible through various means).

CDRL List. Appendix E – page E-10

CDRL-CM-001. Configuration Management Plan (CMP)

CDRL Purpose. The Contractor's CMP describes the contractor's configuration management program, how it is organized, how it will be conducted, and the methods procedures and controls effective configuration identification, change control, status accounting, and audits of the total configuration, including hardware, software and firmware. The principle use is to provide the government a basis for review, evaluation and monitoring of the CM program and its proposed components.

CDRL-CM-002. Configuration Status Accounting Information

CDRL Purpose. The CSA information provides details about the current configuration of items being developed for and/or used in the DoD inventory; about documentation and identification numbers relating to those items; and about changes to the items and their configuration documentation. This information is needed to manage and support those items during their life cycle.

CDRL-CM-003. Configuration Item Documentation Recommendation

CDRL Purpose. The CI documentation recommendation details the development contractor's recommendations for the designation of items as CIs in the contract work breakdown structure and its extensions, and the types of configuration documentation to be used to identify the configuration of CIs. The purpose of this data is to facilitate program management by further decomposition of the system architecture into logical components that will enhance SYE, ILS, and CM efforts. The data also provides the government with technical rationale for selection of the most appropriate types of configuration documentation to be used to describe the performance and physical requirements of CIs.

CDRL-CM-004. Configuration Audit Plan

Purpose. The Configuration Audit Plan provides information required for conducting Functional Configuration Audits (FCA) and Physical Configuration Audits (PCA).

CDRL-CM-005. FCA Summary Report

CDRL Purpose. The Configuration Audit Summary Report provides text and marked-up technical documents (e.g., specifications, engineering drawings) which identify discrepancies between the material (including software) and the requirements delineated in the applicable technical documents. Depending on the type of audit, the identified discrepancies may be attributable to the material, technical documents, or both.

CDRL-CM-006. PCA Summary Report

CDRL Purpose. The Configuration Audit Summary Report provides text and marked-up technical documents (e.g., specifications, engineering drawings) which identify discrepancies between the material (including software) and the requirements delineated in the applicable technical documents. Depending on the type of audit, the identified discrepancies may be attributable to the material, technical documents, or both.

CDRL-CM-007. Configuration Change Control

CDRL Purpose. An ECP provides the documentation in which the engineering change is described. It includes change impacts to systems, CIs and other associated configuration documentation affected by the proposed change. In addition, it typically describes how the proposed change will be implemented along with providing estimated schedules and associated costs. A Notice of Revision (NOR) describes the proposed changes to a technical document being requested by an ECP. After ECP approval, the NOR is forwarded to the custodian of each specification, drawing, associated list, or other applicable document(s) so they can make the required documentation changes.

CDRL-CM-008. Request for Deviation (RFD)

CDRL Purpose. A RFD describes a proposed departure from (a nonconformance with) the contractually specified configuration documentation for a specific number of units or for a specified period of time. A RFD enables the Government to determine the impact on performance, operational readiness, logistics support or other affected areas.

C. Integrated Logistics Support (ILS)

CDRL List. Appendix E – page E-30

ILS-001. Quarterly ILS Meetings

CDRL Purpose. Quarterly ILS meetings with the contractor provides the government with oversight and insight into the contractor's progress on the execution of the ILS program. The contractor should provide the status of all ten ILS elements, or whatever is currently on contract, with a status of funds expended in the effort. There should also be an update of the ILS portion of the Integrated Master Schedule provided. Any issues or challenges that arise should be documented and tracked as action chits. Possible changes to scope or requirements of the contract would need to be identified and provided to the contracting officer.

ILS-002. Integrated Support Plan (ISP)

CDRL Purpose. The contractor's ISP should identify how the contractor plans on executing the requirements of developing a comprehensive logistics support package for the system being acquired. The plan should identify and provide traceability of the supportability data between the various analyses that are accomplished.

D. Supportability Analysis (SUA)

Description. SUA is the process of gathering engineering and logistics data elements from all areas of acquisition, for use in creating logistics reports.

CDRL List. Appendix E – page E-36

CDRL-SUA-001. Logistics Management Information Summaries (LMIS)

CDRL Purpose. The LMI summaries are information used to perform logistics planning and analysis, assess design status, influence program decisions, and verify contractor performance meets system supportability requirements.

CDRL-SUA-002. Logistics Management Information Data Products (LMIDP)

CDRL Purpose. The LMIDP consist of data needed to develop their internal material management processes. This data contains information in the areas of provisioning, cataloging, packaging, and support equipment.

CDRL-SUA-003. Supportability Analysis Program Plan (SAPP)

CDRL Purpose. A description of how the SUA program will be conducted to meet the system and logistics requirements contained in the major project documents.

E. Reliability, Availability & Maintainability (RAM)

Description. This section specifies the requirements the contractor shall fulfill to ensure its plans for managing RAM are made available to the government.

CDRL List. Appendix E – page E-43

RAM-001. RAM Program Plan

CDRL Purpose. The RAM Program Plan provides the contractor's approach to developing and performing the RAM program for the system being developed.

RAM-002. RAM Analysis

CDRL Purpose. The RAM analysis verifies that the allocated subsystem and equipment RAM requirements satisfy the system RAM requirements.

F. Maintenance Planning (MPA)

Description. This section specifies the requirements the contractor shall fulfill to ensure the contractor translates the maintenance approach delineated in the system maintenance concept into the maintenance task requirements that will ensure the ongoing availability of the system.

CDRL List. Appendix E – page E-50

CDRL-MPA-001. RCM and Maintenance Procedure Card (MPC) Development

CDRL Purpose. The Naval Sea Systems Command (NAVSEA) RCM analysis based on MIL-P-24534A provides a complete O-Level maintenance package that consists of preventive and corrective maintenance task identification and development. The analysis can also provide the depot level preventive and corrective maintenance task requirements, although the in depth overhaul procedures are delivered in the Technical Repair Standard (TRS). The MPC is developed by the contractor and provided to the government in XML format. The MPC is the CG's mandated technical manual type for the performance of organization-level preventive and corrective maintenance. It is also the preferred format for depot-level preventive and corrective maintenance.

CDRL-MPA-002. LORA

CDRL Purpose. The LORA uses economic and non-economic criteria to determine the optimum level of repair for the CG. One of the outputs of the LORA is the preliminary SM&R Code for a piece of equipment.

CDRL-MPA-003. Maintenance Requirements List

CDRL Purpose. The Maintenance Requirements List provides maintenance planning information about configuration items previously approved by the government.

G. Supply Support (SUS)

Description. The CG defines supply support as all management actions, procedures, and techniques required to determine requirements for acquire, catalog, receive, store, transfer, issue, and dispose of secondary items. This includes provisioning for initial support as well as replenishment SUS.

The CG conducts supply support for its systems using two major sources of support. The most immediate source of support consists of the on board repair parts delivered with the system. The primary source of support consists of a formally designated, centralized CG Inventory Control Point (ICP). The Government reserves the right to purchase spare and repair parts from the Contractor using Interim Contractor Supply Support.

CDRL List. Appendix E – page E-65

CDRL-SUS-001. Conference

CDRL Purpose. This provides information concerning purpose, location and schedule of conference required to manage the acquisition of systems equipment related items and services.

CDRL-SUS-002. Conference Minutes

CDRL Purpose. This provides documentation of technical information provided and decisions and agreements reached at meetings.

CDRL-SUS-003. Special Equipment Long Lead Time Items List

CDRL Purpose. A listing of items which because of their complexity of design, complicated manufacturing processes, or limited production, may cause production or procurement cycles which would preclude timely or adequate delivery if not ordered in advance of normal provisioning.

CDRL-SUS-004. Provisioning Parts List (PPL)

CDRL Purpose. This list contains the end item, component or assembly and all support items which can be disassembled, reassembled, or replaced, and which, when combined, constitutes the end item, component, or assembly and shall include items such as parts, materials, connecting cabling, piping, and fittings required for the operation and maintenance.

CDRL-SUS-005. Certificate of Identicality (COI)

CDRL Purpose. Certificate signed by the contractor attest that materials and or equipment used on follow-on systems are identical in every respect to the item previously provisioned and approved on an earlier system.

CDRL-SUS-006. Component Identification for Data for Advance Repairable Identification Code (RIC)

CDRL Purpose. A document/record consisting of an alphanumeric designator and the item nomenclature, and serves as a placeholder in the Weapon Systems File until provisioning has been completed.

CDRL-SUS-007. Engineering Data for Provisioning (EDFP)

CDRL Purpose. Data acquired by contract support LMI supportability analysis. This data is necessary for the assignment of SM&R codes to each PLISN on the provisioning list.

CDRL-SUS-008. Tools and Test Equipment List (TTEL)

CDRL Purpose. A listing of unique tools and test equipment required for the repair and use of the end item. This listing is intended to be used by the government to determine provisioning requirements for special equipment.

CDRL-SUS-009. System Configuration Provisioning List (SCPL)

CDRL Purpose. This data establishes the family tree relationship of components to end item when associated PLs are developed at a component level.

CDRL-SUS-010. Design Change Notice (DCN)

CDRL Purpose. A formal document prepared by a Contractor or a Government activity to notify the Technical Support Activity of changes to previously delivered provisioning lists, which add to, delete, supersede or modify items which are approved for incorporation into the end item.

CDRL-SUS-011. Interim Support Items List (ISIL)

CDRL Purpose. This data consists of those support items required between operational need

date and the point in time that provisioning for operational requirements has been accomplished.

CDRL-SUS-012. Baseline System Files for Storeroom and Operating Space Items.

CDRL Purpose. This report identifies differences between the contractor's Baseline Asset Files-Storeroom Item (BAF-SRI) and loading Coordinated Shipboard Allowances. It forms the basis for correcting or adjusting ordering documents to satisfy government allowance requirements.

CDRL-SUS-013. Outfitting Operations Plan

CDRL Purpose. This plan details the contractor's proposed organization, responsibility and procedures for the coordinated performance of the technical processes required by Fitting Out Procedures Ships and serves as the principal means of planning and executing contractor outfitting operations.

CDRL-SUS-014. Operating Space Items (OSI)/Storeroom Items (SRI) and General Use Consumable List (GUCL) Listings

CDRL Purpose. The shipboard storage location list identifies all operating space items and loose hardware items that will be loaded by the contractor into the ship work centers and operating spaces. This list provides the government with the documentation required to plan the orderly transfer of custody of operating space items.

CDRL-SUS-015. Outfitting Material Status Reports

CDRL Purpose. This report provides the government with the documentation required to monitor the receipt of outfitting material.

CDRL-SUS-016. Binned Material List

CDRL Purpose. The binned material list provides the government with the documentation required to conduct quality assurance verifications of storeroom inventory accuracy prior to delivery of the ship.

H. Diminishing Manufacturing Sources and Material Shortages (DMSMS)

Description. This section specifies the requirements the contractor shall fulfill to ensure a comprehensive, proactive, DMSMS management program is implemented.

CDRL List. Appendix E – page E-110

CDRL-DMS-001. DMSMS Management Plan

CDRL Purpose. The DMSMS Management Plan provides a detailed plan for the establishment, implementation and management of the DMSMS Program.

CDRL-DMS-002. DMSMS IPT Meeting Minutes

CDRL Purpose. The contractor records and distributes minutes of every IPT meeting.

CDRL-DMS-003. DMSMS Forecast Report

CDRL Purpose. This report forecasts likely future obsolescence issues.

CDRL-DMS-004. Source data for forecasting DMSMS

CDRL Purpose. Source Data is an ongoing data collection effort and is used to develop the Forecast Report.

CDRL-DMS-005. Technology Roadmap

CDRL Purpose. The Technology Roadmap depicts an system's current planned technology (e.g., processor speed, size, capacity, performance, etc.) mapped against industry technology roadmaps and planned market life expectancy over the proposed life of the system.

I. Standardization (STD)

Description. STD provides for common usage of equipment, components, parts, and materials to promote commonality among systems. It maximizes the use of non-developmental items, standard parts, reliable parts, common publications, manuals and training aids, common materials and processes to lower cost, reduce downtime, facilitate interchangeability, and promote commonality.

CDRL List. Appendix E – page E-129

CDRL-STD-001. Standardization Program Plan (SPP)

CDRL Purpose. The SPP identifies the standardization procedures, goals, and metrics the contractor uses to maximize standardization.

CDRL-STD-002. Standardization Accomplishment Report (SAR)

CDRL Purpose. Used by the government to verify or demonstrate that specific standardization requirements are being performed.

J. Parts Management (PMT)

Description. The PMT is a process to reduce total cost of ownership and increase logistics readiness, promote interoperability, enhance the interchangeability, reliability, and availability of parts, minimize DMSMS impacts, assist in meeting end item performance goals, assist with parts selection and qualification procedures, minimize the proliferation of parts and drawings through.

CDRL List. Appendix E – page E-135

CDRL-PMT-001. Parts Management Plan

CDRL Purpose. The plan describes the program management process, the parts selection process, DMSMS mitigation strategy, program metrics, and government participation.

K. Human Systems Integration (HSI)

Description. This section provides an overview of HSI in acquisition. The goal is to incorporate HSI principles, methods, tools and data in all aspects of acquisition. The six domains involved are manpower and personnel (MAP), TTE, HFE, SYS, HH and SSv.

CDRL List. Appendix E – page E-140

L. Manpower and Personnel (MAP)

Description. This section describes the requirements for developing staffing levels support. It identifies specific information and material requirements the Contractor will furnish to identify personnel requirements to operate, maintain, support and instruct the System. This section also applies to staffing requirements for shore support personnel who will support the system once delivered.

CDRL List. Appendix E – page E-141

CDRL-MAP-001. Manpower Requirements Analysis (MRA)

CDRL Purpose. The MRA ensures the CG has the necessary information to develop manpower requirements. This Analysis documents what we know and do not know about the asset and its components; results in a systemic plan that makes immediate estimate of impact to Commandant (CG-1) programs/initiatives and recommends more detailed work appropriately. Information required includes:

1. operating crew models,
2. task analysis and allocation,
3. function analysis and allocation,
4. operational analysis,
5. maintenance analysis, and
6. ship, air station, and facility manpower documents to include operational and support manpower requirements related the system and the supporting rationale for all decisions concerning the billet development process.

M. Training and Training Equipment (TTE)

Description. This section describes the requirements for analyzing, designing and developing, implementing and evaluating Performance Support and Training Systems. Performance Support and Training Systems include familiarization for initial crews upon delivery as well as systemic qualification systems, embedded performance support systems, stand alone performance support systems, job aids of all types and resident training. It integrates training concepts and strategies and elements of logistics support to most effectively and efficiently support desired personnel performance levels required to operate, maintain, and support, systems. It includes the “tools” used to provide learning experiences such as computer-based interactive courseware, simulators, and actual equipment (including embedded training capabilities on actual equipment) and Interactive Electronic Technical Manuals (IETMs). This section also applies to training requirements for shore support personnel who will support the system once delivered.

CDRL List. Appendix E – page E-154

CDRL-TTE-001. Performance Support and Training Needs Assessment

CDRL Purpose. The purpose of the CDRL is to provide an assessment of the availability and maturity of operational and maintenance (including shore support for afloat systems) concept of operations, maintenance philosophy/plans or other information that provides sufficient

detail about the expected performer, performance expectations and the performance environment.

CDRL-TTE-002. Front End Analysis (FEA) final report

CDRL Purpose. FEAs will result in the identification of the most effective and efficient means for supporting validated human performance requirements for a system.

CDRL-TTE-003. Performance Support and Training (PS&T) System Plan

CDRL Purpose. This plan shall provide the results and recommendations of all analyses and FEAs conducted as a result of the PS&T Needs Assessment. This plan shall include and clearly identify at least 3 possible solutions for each recommendation and the appropriate justification/explanation for each recommended solution. Each possible solution shall include a cost benefit analysis that considers all costs including training aids, staffing, FAC, etc. The plan shall include and clearly identify those systems that are for initial as well as sustainment support and describe appropriate integration and transition points.

CDRL-TTE-004. PS&T Progress Report

CDRL Purpose. The purpose of this report is to formally document and report the delivery of training or other performance support and other data that can be used to determine the effectiveness and efficiency of the training.

CDRL-TTE-005. Instructor Qualification

CDRL Purpose. The purpose of this CDRL is to ensure each instructor(s) selected by the contractor to conduct training shall be technically competent to instruct in operation and maintenance of the systems and any other equipment required for operation of the system.

N. Human Factors Engineering (HFE)

Description. HFE is the systematic application to system design and engineering of relevant factors concerning human characteristics. These factors include skill capabilities; performance; anthropometric data; biomedical factors; and training implications to system development, design, acquisition strategy, and manning.

CDRL List. Appendix E – page E-172

CDRL-HFE-001. Human Engineering Project Plan (HEPP)

CDRL Purpose. The HEPP document describes the contractor's human engineering program, identifies, and explains how the elements will be managed, and fully incorporated into the system's design.

O. Systems Safety (SYS)

Description. SYS covers the design features and operating characteristics of a system that serve to minimize the potential for human or machine errors or failures that cause injurious situations.

CDRL List. Appendix E – page E-179

CDRL-SYS-001. System Safety Program Plan. (SSPP)

CDRL Purpose. This plan details the task and activities of system safety management and system safety engineering required to identify, evaluate, and eliminate or control hazards throughout the changes from the baseline configuration. The SSPP describes fully the planned safety tasks and activities required to meet the System Safety Program (SSP) requirements.

CDRL-SYS-002. System Safety Hazard Analysis Report (SSHAR)

CDRL Purpose. Hazard Analyses are used to systematically identify and evaluate hazards, both real and potential, for their elimination or control. The SSHAR documents these hazard analyses.

CDRL-SYS-003. System Safety Program Progress Report (SSPPR)

CDRL Purpose. The SSPPR can be used to cover periodic reviews of safety activities and to monitor progress of contractor system safety efforts.

CDRL-SYS-004. Engineering Change Proposals System Safety Report (ECPSSR)

CDRL Purpose. The ECPSSR can be used to summarize results of analyses, tests and tradeoff studies conducted on proposed engineering design changes and their impacts to safety throughout the system life cycle.

CDRL-SYS-005. Waiver or Deviation System Safety Report (WDSSR)

CDRL Purpose. The WDSSR summarizes the results of analysis, tests and tradeoff studies as they relate to a request for waiver/deviation. It will identify risk assessment, mishap potential, and justification associated with results of each waiver or deviation request received throughout the system lifecycle.

CDRL-SYS-006. Safety Assessment Report

CDRL Purpose. The safety assessment report is a comprehensive evaluation of the safety risks being assumed prior to test or operation of the system or at contract completion. It identifies all safety features of the system, design, and procedural hazards that may be present in the system being acquired, and specific procedural controls and precautions that should be followed.

CDRL-SYS-007. Safety Studies Plan

CDRL Purpose. This plan describes how the contractor will conduct safety studies to achieve the safety requirements set forth in the specifications. This plan is the basis for the contractor's entire safety effort and provides assurance to the procuring activity that all

hazards associated with the equipment are identified and eliminated or controlled by engineering design.

CDRL-SYS-008. Safety Studies Report (SSR)

CDRL Purpose. Provides the CG with a means to evaluate the safety being designed into the equipment.

CDRL-SYS-009. Radiation Hazard Control Procedures (RHCP)

CDRL Purpose. The RHCP provides the data describing and defining radio frequency power density and x-ray characteristics for ground electronic systems, subsystems, equipment, components and end items

CDRL-SYS-010. Explosive Ordnance Disposal (EOD) Data

CDRL Purpose. This source data shall contain essential information that is used by the Naval Explosive Ordnance Disposal Technology Division to develop, test, validate and publish joint service non-nuclear EOD 60-series technical manuals.

CDRL-SYS-011. Explosive Hazard Classification Data (EHCD)

CDRL Purpose. The purpose of this document is to obtain the necessary information for assigning hazard classification, such as hazard class/division, storage compatibility group and Department of Transportation (DOT) marking.

CDRL-SYS-012. Mishap Risk Assessment Report (MRAR)

CDRL Purpose. The MRAR provides a comprehensive identification and evaluation of the mishap risks assumed during the processing and operation of a system(s) throughout its life cycle. It provides a means of confirming the compliance with the program safety requirements.

CDRL-SYS-013. Ammunition Data Card (ADC)

CDRL Purpose. The ammunition data card is used to acquire a record containing essential data pertaining to the initial history of a lot of ammunition and explosive material. The data card is used to provide traceability of explosive items.

CDRL-SYS-014. Safety Decisions Lessons Learned.

CDRL Purpose. Requires that the contractor document and submit to the government significant safety decisions as “lessons learned” or as proposed changes to applicable design handbooks and specifications.

CDRL-SYS-015. Hazard Mitigation Plan

CDRL Purpose. The Hazard Mitigation Plan should identify all hazards and ways to reduce the probability of a hazardous occurrence to an acceptable level of risk, within constraints of mission requirements.

CDRL-SYS-016. Closed Loop Hazard Tracking System

CDRL Purpose. Develop and maintain a Closed Loop Hazard Tracking System which maintains

records of all identified hazards.

P. Health Hazards (HH)

Description. This section addresses the design features and operating characteristics of a system that create significant risks of bodily injury or death. The contractor shall establish a HH assessment to include cost avoidance figures to support trade off analysis.

CDRL List. Appendix E – page E-203

CDRL-HH-001. Health Hazard Assessment Report (HHAR)

CDRL Purpose. The Health Hazard Report should systematically identify and evaluate HH, evaluate proposed HAZMAT, and propose measures to eliminate or control these hazards through engineering design changes or protective measures to reduce the risk to an acceptable level.

Q. Personnel Survivability (SSv)

Description. This section addresses the characteristics of a system that can reduce fratricide, detectability, probability of being attacked, as well as minimize system damage, personnel injury, and cognitive and physical fatigue.

CDRL List. Appendix E – page E-207

CDRL-SSv- 001. Survivability Cost effectiveness Tradeoff Studies Report

CDRL Purpose. This report support the assessment of the operational effectiveness and suitability of systems design concepts and characteristics in threat environments. It is indispensable in comparing alternative concepts in the pre-MS I timeframe and in identifying and quantifying critical survivability characteristics which must be included in operational requirements.

R. Environment, Safety, and Occupational Health (ESOH)

Description. This section specifies the performance requirements the contractor shall fulfill to ensure ESOH program considerations are fully incorporated by the contract into the system's design.

CDRL List. Appendix E – page E-212

CDRL-ESOH-001. Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE)

CDRL Purpose. The management document that describes the ESOH Program. It describes how ESOH considerations are accounted for in system design.

S. Facilities (FAC)

Description. FACs are the permanent or temporary real property buildings, structures, utilities, and land required to support the system, including conducting studies to define FACs or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment. FACs support normally includes buildings, structures, utilities, parameters, and the underlying ground where the end article/item will be housed or serviced.

CDRL List. Appendix E – page E-218

CDRL-FAC-001. FAC Requirements Document (FRD)

CDRL Purpose. This document addresses issues for the Trainer Facilities Report (TFR) and the FAC Plan. The TFR defines and identifies criteria and requirements necessary to design and construct/modify a facility in which the trainer and associated equipment will be installed, operated, and maintained. The report identifies contractor and government responsibilities and the time frame in which the responsibilities will be completed. The FAC Plan identifies and describes all existing and proposed facilities which are required to support stated requirements. The plan is used in the preparation of the military construction program.

CDRL-FAC-002. Logistics Management Information for FAC

CDRL Purpose. The LMI summaries are information used to perform logistics planning and analysis, assess design status, influence program decisions, and verify contractor performance meets system supportability requirements. It contains approved data products for FAC and logistics support.

CDRL-FAC-003. Site Survey Report (SSR)

CDRL Purpose. The SSR documents the findings of the contractor's site survey. The SSR is used to identify any discrepancies between conditions described by the contract and actual on-site conditions.

T. Computer Resources Support (CRS)

Description. CRS is the FAC, hardware, software (system software and support software), software development and support tools, documentation, personnel, training or other resources necessary to operate and support embedded computer systems and software intensive systems.

CDRL List. Appendix E – page E-227

CDRL-CRS-001. Computer Resources Support Analysis (CRSA)

CDRL Purpose. The CRSA will determine all factors necessary to support a system's computer hardware and software, including training, utilities, security, environment, and data storage.

CDRL-CRS-002. Risk Management Program.

CDRL Purpose. Requires that the contractor develop and manage a Risk Management Program for the CRS effort, which includes policies, procedures, and practices involved in

identification, analysis, assessment, control, avoidance, minimization, or elimination of unacceptable risks.

CDRL-CRS-003. Concept of Operations Document (ConOps)

CDRL Purpose. The ConOps document is used to communicate overall quantitative and qualitative system characteristics to the user, buyer, developer, and other organizational elements (i.e., training, FAC, staffing, and maintenance). It is also used to describe the user organization(s), mission(s), and organizational objectives from an integrated systems point of view.

CDRL-CRS-004. Software Development Plan (SDP)

CDRL Purpose. The SDP describes a developer's plans for conducting a software development effort.

CDRL-CRS-005. Software Design Description (SDD)

CDRL Purpose. The SDD describes the design of a computer software configuration item. It describes the CSCI-wide design decisions, the CSCI architectural design, and the detailed design needed to implement the software.

CDRL-CRS-006. Computer Software System Document (CSSD)

CDRL Purpose. This document fully describes the requirements of a software program. The program is specified in terms of module, functions of the modules, and sub-functions.

CDRL-CRS-007. Software Resources Data Reporting; Initial Developer Report and Data Dictionary

CDRL Purpose. These two deliverables are used to obtain the estimated characteristics of a software product and its development process, define each of the data elements within the software resources data report, and describe rules and methods used to perform data measurement or estimation.

CDRL-CRS-008. Software Version Description (SVD)

CDRL Purpose. The SVD is a process to number versions of software of software products.

CDRL-CRS-009. Software Developmental Status Report (SDSR)

CDRL Purpose. The SDSR provides the status of software development parameters for a particular computer software configuration item or hardware configuration item that incorporates software technology.

CDRL-CRS-010. Software Test Plan (STP)

CDRL Purpose. The STP describes plans for qualification testing of computer software configuration items and software systems. It describes the software test environment to be used for the testing, identifies the tests to be performed, and provides schedules for test activities.

CDRL-CRS-011. Software Test Description (STD)

CDRL Purpose. The STD describes the test preparations, test cases, and test procedures to be used to perform qualification testing of a computer software configuration item or a software system or subsystem.

CDRL-CRS-012. Software Test Report (STR)

CDRL Purpose. The STR is a record of the qualification testing performed on a computer software configuration item, a software system or subsystem, or other software-related item.

CDRL-CRS-013. Computer Software Product (CSP)

CDRL Purpose. The CSP is a deliverable that provides data relative to software source code and documentation.

CDRL-CRS-014. Computer Program End Item Documentation

CDRL Purpose. Computer Program End Item Documentation defines the requirements for documentation to accompany the delivery of software end items.

CDRL-CRS-015. Software Resources Data Reporting (SRDR); Final Developer Report and Data Dictionary

CDRL Purpose. The SRDR Final Report contains actual, as-built software measurement data as described in the contractor's SRDR Data Dictionary.

CDRL-CRS-016. Software User Manual (SUM)

CDRL Purpose. The SUM describes to a hands-on software user how to install and use a Computer Software Configuration Item (CSCI), a group of related CSCIs, or a software system or subsystem. It may also cover a particular aspect of software operation, such as instructions for a particular position or task.

CDRL-CRS-017. Computer Operation Manual (COM)

CDRL Purpose. The COM provides information needed to operate a given computer and its peripheral equipment. This manual focuses on the computer hardware itself, not on a particular computer software configuration item that will run on the computer.

CDRL-CRS-018. Software Center Operator Manual (SCOM)

CDRL Purpose. The SCOM provides personnel in a computer center or other centralized or networked software installation information on how to install and operate a software system. The SCOM is developed for software systems that will be installed in a computer center or other centralized or networked software installation, with users accessing the system via terminals or personal computers, or submitting and receiving inputs and outputs in batch or interactive mode.

CDRL-CRS-019. Software Transition Plan

CDRL Purpose. The software transition plan documents how the contractor will transition project software from contractor ownership and support, to Government ownership and support.

CDRL-CRS-020. Software Installation Plan (SIP)

CDRL Purpose. The SIP documents how the software will be installed into the system.

CDRL-CRS-021. Computer Resources Working Group (CRWG) Minutes

CDRL Purpose. Requires the contractor develop and provide meeting minutes for CRWG meetings.

CDRL-CRS-022. Software Maintenance Plan (SMP)

CDRL Purpose. The SMP provides overall guidance on how and at what level maintenance will be performed on the software, and on the support requirements for this maintenance.

CDRL-CRS-023. Software Safety Requirements and Analysis (SSRA)

CDRL Purpose. The contractor conducts an analysis of possible safety concerns that might result during software use.

CDRL-CRS-027. Software Design and Safety Analysis

CDRL Purpose. Identifies software safety design features and methods, and ensures they can be thoroughly tested.

CDRL-CRS-024. Software Implementation and Safety Analysis

CDRL Purpose. Describes how the software will be implemented with software safety design features and methods.

CDRL-CRS-025. Software Test and Safety Analysis (STSA)

CDRL Purpose. Describes the safety procedures for software testing

CDRL-CRS-026. Software Security Plan

CDRL Purpose. The Software Security Plan defines how the software will be protected from viruses and illegal and unauthorized access.

CDRL-CRS-027. Software Quality Assurance

CDRL Purpose. Describes the contractor's Quality Assurance program for software development.

U. Support Equipment (SUE)

Description. This section specifies the requirements to ensure that the contractor provides the equipment, mobile or fixed, required to support the operation and maintenance of a material system.

CDRL List. Appendix E – page E-263

CDRL-SUE-001. Support Equipment Recommendation Data

CDRL Purpose. After the contractor identifies a requirement for SUE based on the end item SUA, the contractor provides the data requirements contained in the LMI Data Products

Worksheets, which is then called the Support Equipment Recommendation Data (SERD).

CDRL-SUE-002. Early Support Equipment Identification Report (ESEIR)

CDRL Purpose. The ESEIR lists SUE that has such a long lead-time for development, that it cannot follow the normal SUE development and production timeframe.

CDRL-SUE-003. SERD Sketches

CDRL Purpose. A SERD sketch is a simple graphic drawing or picture illustrating what the SUE System will look like.

CDRL-SUE-004. Nomenclature/ID Plates/Type Equipment Codes/Serial Numbers (SNs)

CDRL Purpose. A process for the contractor to request assignment of nomenclature and approval of identification plate drawings, type equipment codes, and SNs for all support equipment items and the end item from the government.

CDRL-SUE-005. Test and Evaluation Program Plan (TEPP)

CDRL Purpose. The contractor's plan for conducting test and evaluation of all support equipment, including compatibility testing of all pre-existing support equipment, and then identifying these requirements in the SERD.

CDRL-SUE-006. Test Plan

CDRL Purpose. The Test Plan outlines the plans and performance objectives at every level of SUE testing on systems or equipment. It provides the test concept, objectives and requirements to be satisfied, test methods, elements, responsible activities associated with the testing, measures required and recording procedures to be used.

CDRL-SUE-007. LMI Data Products List for SUE

CDRL Purpose. The LMI provides information and reports required by the government to perform acquisition logistics functions. This LMI Data Products List applies to data requirements for end items of SUE, and logistics support for SUE.

CDRL-SUE-008. SUE Integrated Product Team (SEIPT) Minutes

CDRL Purpose. The contractor records and distributes minutes of every IPT meeting.

CDRL-SUE-009. Support Equipment Guidance Conference Minutes

CDRL Purpose. The contractor records and distributes minutes of the guidance conference.

CDRL-SUE-010. Support Equipment Installation Data (SEID)

CDRL Purpose. The SEID provides the Government with information required for the installation of SUE in existing or planned shipboard or shore-based FAC.

V. Packaging, Handling, Storage & Transportation (PHS&T)

Description. This standard is intended to be used in contracts for systems and equipment to control the development, design and use of adequate packaging, handling, storage, and associated equipment and procedures for the system or equipment and to control the transportability project requirements.

CDRL List. Appendix E – page E-283

CDRL-PHS&T-001. Packaging Requirements Code

CDRL Purpose. The contractor(s) describes the packaging materials and techniques necessary to protect items from the physical and environmental effects of the logistics cycle.

CDRL-PHS&T-002. Test Package

CDRL Purpose. Data that the contractor(s) develops for packaging requirements for all new "P" source code Depot Level Repairable (DLR), Field Level Repairable (FLRs) and consumable.

CDRL-PHS&T-003. Packaging Kit Content List

CDRL Purpose. Data that the contractor(s) develops for packaging requirements for all new "P" source code DLR, FLRs and consumable.

CDRL-PHS&T-004. Packaging Development Data Report

CDRL Purpose. Data that the contractor(s) develops for packaging requirements for all new "P" source code DLR, FLRs and consumable.

CDRL-PHS&T-005. Logistics Management Information Product (s)

CDRL Purpose. The data prepares and provides preservation and packaging data for items that are procured for the operational inventory. The data provides all packaging data and SPIs submitted (including that from lower-tier contractors) as the result of various contract data items are compatible, prior to those data being submitted to DoD agencies.

CDRL-PHS&T-006. Preservation and Packing Data

CDRL Purpose. The data prepares and provides preservation and packaging data for items that are procured for the operational inventory. The data provides all packaging data and SPIs submitted (including that from lower-tier contractors) as the result of various contract data items are compatible, prior to those data being submitted to DoD agencies.

CDRL-PHS&T-007. Packaging Plan

CDRL Purpose. Identifies the trade-off analysis for the contractor(s) which describes each packaging option and its development and projected manufacturing cost, additionally provides guidance to the contractor to identify all special handling procedures, and any existing specific packaging handling and transportation plan used as a basis for contractor (s) transportability designed consideration.

CDRL-PHS&T-008. Packaging Test Plan

CDRL Purpose. Identifies the trade-off analysis for the contractor(s) which describes each packaging option and its development and projected manufacturing cost, additionally provides guidance to the contractor to identify all special handling procedures, and any existing specific packaging handling and transportation plan used as a basis for contractor (s) transportability designed consideration.

CDRL-PHS&T-009. Packaging Test Plan

CDRL Purpose. Identifies the trade-off analysis for the contractor(s) which describes each packaging option and its development and projected manufacturing cost, additionally provides guidance to the contractor to identify all special handling procedures, and any existing specific packaging handling and transportation plan used as a basis for contractor (s) transportability designed consideration.

CDRL-PHS&T-010. Special Packaging Instructions

CDRL Purpose. Identifies the trade-off analysis for the contractor(s) which describes each packaging option and its development and projected manufacturing cost, additionally provides guidance to the contractor to identify all special handling procedures, and any existing specific packaging handling and transportation plan used as a basis for contractor (s) transportability designed consideration.

CDRL-PHS&T-011. Packaging Cost Analysis

CDRL Purpose. Provides the contractor(s) data on the projected production cost applicable to the packaging configuration and materials for the end items, repair parts; and replacement parts and the not design cost.

CDRL-PHS&T-012. Design Review Information Package (DRIP)

CDRL Purpose. Provides guidance to the contractor(s) for developing Level III drawings and all associated technical data and provide enough data to allow for manufacturing.

CDRL-PHS&T-013. Container Design Retrieval System Search Request

CDRL Purpose. Provides guidance to the contractor(s) for developing Level III drawings and all associated technical data and provide enough data to allow for manufacturing.

CDRL-PHS&T-014. CDRS Data Input

CDRL Purpose. Provides guidance to the contractor(s) for developing Level III drawings and all associated technical data and provide enough data to allow for manufacturing.

CDRL-PHS&T-015. Installation Design Reservation Data

CDRL Purpose. Provides guidance to the contractor(s) for developing Level III drawings and all associated technical data and provide enough data to allow for manufacturing.

CDRL-PHS&T-016. Preservation, Packaging, and Packing (PP&P) Drawing (s)

CDRL Purpose. Provides guidance to the contractor(s) for developing Level III drawings and all associated technical data and provide enough data to allow for manufacturing.

CDRL-PHS&T-017. Hazardous Material Summary

CDRL Purpose. Provides hazard safety information to the contractor(s) and the end user activity with all safety caution and preventive measures to be taken.

CDRL-PHS&T-018. HAZMAT Management Program (HMMP) Report

CDRL Purpose. Provides hazard safety information to the contractor(s) and the end user activity with all safety caution and preventive measures to be taken.

CDRL-PHS&T-019. HMMP Plan

CDRL Purpose. Provides hazard safety information to the contractor(s) and the end user activity with all safety caution and preventive measures to be taken.

CDRL-PHS&T-020. Operating Procedures for HAZMAT

CDRL Purpose. Provides hazard safety information to the contractor(s) and the end user activity with all safety caution and preventive measures to be taken.

CDRL-PHS&T-021. Age-deteriorable Materials

CDRL Purpose. Data required by the contractor(s) to manage deteriorable elastomers with expected shelf life of five (5) years or less and ensure that contractor(s) use the guidance of the Navy/DoD Storage Time Limitation (Shelf Life) Program.

CDRL-PHS&T-022. Phased Support Plan

CDRL Purpose. Identify issue(s) with the facility relative to its suitableness for the inspection and Acceptance Trials. Additionally gives the responsibility to the contractor for all arrangements to support the delivery acceptance of the system.

CDRL-PHS&T-023. Management Plan

CDRL Purpose. Identify issue(s) with the facility relative to its suitableness for the inspection and Acceptance Trials. Additionally gives the responsibility to the contractor for all arrangements to support the delivery acceptance of the system.

CDRL-PHS&T-024. Report, Production or Delivery Problem (s)

CDRL Purpose. Identify issue(s) with the facility relative to its suitableness for the inspection and Acceptance Trials. Additionally gives the responsibility to the contractor for all arrangements to support the delivery acceptance of the system.

CDRL-PHS&T-025. Transition Plan

CDRL Purpose. Identify issue(s) with the facility relative to its suitableness for the inspection and Acceptance Trials. Additionally gives the responsibility to the contractor for all arrangements to support the delivery acceptance of the system.

CDRL-PHS&T-26. Item Unique Identification (IUID) Requirements

CDRL Purpose. Contractor(s) provides information on how the guidelines to execute IUID program are being satisfied.

CDRL-PHS&T-27. Transportation Plan

CDRL Purpose. Establishes guidance to obtain essential information from the contractors for evaluating the transportation limitation and restrictions of DoD equipment that qualifies as a transportability item.

CDRL-PHS&T-28. Transportation Data Report

CDRL Purpose. Establishes guidance to obtain essential information from the contractors for evaluating the transportation limitation and restrictions of DoD equipment that qualifies as a transportability item.

CDRL-PHS&T-29. Transportability Report

CDRL Purpose. Establishes guidance to obtain essential information from the contractors for evaluating the transportation limitation and restrictions of DoD equipment that qualifies as a transportability item.

CDRL-PHS&T-30. Air Transportability Report

CDRL Purpose. Establishes guidance to obtain essential information from the contractors for evaluating the transportation limitation and restrictions of DoD equipment that qualifies as a transportability item.

CDRL-PHS&T-31. Report of Shipping (ITEM) and Packaging Discrepancy

CDRL Purpose. Establishes guidance to obtain essential information from the contractors for evaluating the transportation limitation and restrictions of DoD equipment that qualifies as a transportability item.

CDRL-PHS&T-32. Transportation Data Report for Oversized and Hazardous Cargo

CDRL Purpose. Provides guidance to the contractor(s) on how the contractor will transport oversized and hazardous cargoes to the end-user.

CDRL-PHS&T-33. Air Transportation Data Report for Oversized and Hazardous Cargo

CDRL Purpose. Provides guidance to the contractor(s) on how the contractor will transport oversized and hazardous cargoes to the end-user.

W. Quality Assurance (QUA)

Description. The International Organization for Standardization (ISO) 9000 family of standards represents an international consensus on good quality management practices. It consists of standards and guidelines relating to quality management systems and related supporting standards. ISO 9001.2000 is the standard that provides a set of standardized requirements for a quality management system, regardless of what the user organization does, its size, or whether it is in the private, or public sector. This CDRL ensures the contractor maintains ISO certification or other acceptable certification.

CDRL List. Appendix E – page E-330

CDRL-QUA-001. Quality Plan

CDRL Purpose. The quality assurance project purpose is to ensure the contractor maintains a QUA system and incorporates QUA principles and practices into the system's design.

Appendix E
Sample SOW Language Templates
And Sample CDRLs

SOW and CDRL Categories

CDRL Category	Name	Page #
Systems Engineering	SYE	E-3
Configuration Management	CM	E-10
Integrated Logistics Support	ILS	E-30
Supportability Analysis	SUA	E-36
Reliability, Availability & Maintainability	RAM	E-43
Maintenance Planning	MPA	E-50
Supply Support	SUS	E-65
Diminishing Manufacturing Sources and Material Shortages	DMS	E-110
Standardization	STD	E-129
Parts Management	PMT	E-135
Human Systems Integration	HSI	E-140
Manpower and Personnel	MAP	E-141
Training and Training Equipment	TTE	E-154
Human Factors Engineering	HFE	E-172
Systems Safety	SYS	E-179
Health Hazards	HH	E-203
Personnel Survivability	SSv	E-207
Environment, Safety, and Occupational Health	ESOH	E-212
Facilities	FAC	E-218
Computer Resources Support	CRS	E-227
Support Equipment	SUE	E-263
Packaging, Handling, Storage & Transportation	PHS&T	E-283
Quality Assurance	QUA	E-330

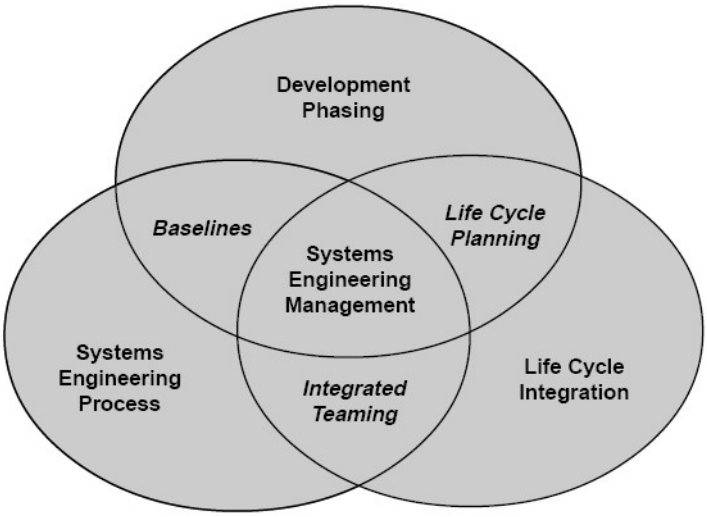
Systems Engineering Management (General Description)

As illustrated below in Figure E-1, Systems engineering management is accomplished by integrating three major activities:

1. Development phasing that controls the design process and provides baselines that coordinate design efforts.
2. A Systems engineering process that provides a structure for solving design problems and tracking requirements flow through the design effort, and
3. Life cycle integration that involves customers in the design process and ensures that the System developed is viable throughout its life.

Each one of these activities is necessary to achieve proper management of a development effort. Phasing has two major purposes. it controls the design effort and is the major connection between the technical management effort and the overall acquisition effort. It controls the design effort by developing design baselines that govern each level of development. It interfaces with acquisition management by providing key events in the development process, where design viability can be assessed. The viability of the baselines developed is a major input for acquisition management MS decisions. As a result, the timing and coordination between technical development phasing and the acquisition schedule is critical to maintain a healthy acquisition program.

Figure E-1 --- excerpt from the DAU Systems Engineering Fundamentals, 2001



SYSTEM ENGINEERING (SYE)

A. General Overview.

1. Purpose. This section specifies the performance requirements the contractor shall fulfill to ensure the contractor uses the SYE process to design and construct the [SYSTEM] System to meet all of the requirements identified in the Contract.

2. Scope. The SYE program for the project will cover all Systems being acquired.

B. Background. The SYE process provides the overarching linkage between design, execution and life-cycle support. The contractor should use SYE and technical management for designing and integrating engineering. The contractor should identify the planned integration of Systems throughout the design process.

C. Definitions & Terms.

1. Modular Design. A design approach that adheres to four fundamental tenets of cohesiveness, encapsulation, self-containment, and high binding to design a System component as an independently operable unit subject to change.

2. Modular Open Systems Approach (MOSA). An integrated business and technical strategy that employs a modular design and, where appropriate, defines key interfaces using widely supported, consensus-based standards that are published and maintained by a recognized industry standards organization.

D. References.

1. Electronics Industry Association Standard ANSI/GEIA EIA-632.

2. DoD Systems Engineering Plan (SEP) Preparation Guide, version 1.02, February 2006.

3. DHS Instruction/Guidebook #102-01-001

E. Roles & Responsibilities.

1. System Engineering Management Plan (SEMP). The contractor shall prepare and deliver a SEMP IAW CDRL-SYE-001. The SEMP shall provide the contractor's integrated approach for:

   a. Acquisition and Supply.

   b. Technical Management.

   c. System Design.

   d. Product Realization.

   e. Technical Evaluation for the [SYSTEM].

2. The SEMP shall define the contractor's plan for conducting and managing a fully integrated, total program effort and defining how the enabling products (technical data package) will be developed to support the end product (the [SYSTEM]). The SEMP shall identify and tailor SYE processes, requirements and tasks from the Electronics

Industry Association Standard ANSI/GEIA EIA-632 to satisfy program requirements. The SEMP shall include the contractors approach to:

a. Information Management.

b. Design Reviews.

c. Reliability, Maintainability and Availability.

d. Integrated Logistics Support.

e. Maintenance Planning.

f. Supply Support.

g. Human Systems Integration.

h. Quality Assurance.

i. Testing, Trials, and Verification.

j. Weight Control.

k. Risk Management in addition to other contractor plans required to engineer the total System.

3. Contract Work Breakdown Structure. The contractor shall prepare and submit a CWBS IAW CDRL SYE-002 and based on MIL-HDBK-881. While the final responsibility for the design of a fully compliant [SYSTEM] belongs to the contractor, the CG will review the technical data to confirm contract compliance and requirements traceability during the design review process. The CWBS shall be the basis for the structure of the design reviews.

4. Preliminary Design Review (PDR). The Contractor shall schedule and conduct the PDR. The CIs for PDR shall include the [SYSTEM], the structure, mission critical equipment, configuration items, and any other equipment, System, or subsystem necessary for meeting the requirements of this Section. At the PDR, the contractor shall provide a description of the system at the subsystem or module level in sufficient detail to show the allocation of the end-item requirements and the necessary interfaces between the subsystems or modules. The PDR shall provide all of the information required to establish the allocated configuration baseline for the system to be produced. The end-item system shall be graphically depicted with top-level drawings to show a block diagram and how the individual parts of the block diagram are interfaced.

5. Critical Design Review (CDR). The contractor shall schedule and complete the CDR in order to meet the [SYSTEM] delivery schedule. The CIs for CDR shall include the [SYSTEM], the hull, the hull structure, mission critical equipment, CIs, and any other equipment, System, or subsystem necessary for meeting the requirements of this Section. At the CDR, the contractor shall provide detailed drawings showing the complete design of the system and how it will be constructed/assembled. Detailed interface information at the component or module level and any applicable processes or materials that are specifically required must be identified. The CDR shall provide all of the necessary information to establish the product configuration baseline. For software, the CDR shall

provide detailed specifications at the module level, identify all interfaces in detail, and identify how the modules will be coded.

The USCG will consider the CDR complete when the contractor has achieved the following entrance criteria:

a. Approved Calculations.

b. Approved Configuration Management Plan.

c. Approved Noise Control Design History.

d. Approved System Safety Program Plan.

e. Approved Integrated Support Plan.

f. Approved Human Factors Engineering Plan.

g. Draft testing matrix containing all requirements of the CDR as required by the Test and Evaluation Program Plan.

h. Approved Weight Control Program Plan Design and Construction Weight Report reflecting Baseline Weight Estimate that is consistent with all CDR documentation and required deliverables.

i. Received favorable Contract Design Evaluation from ABS indicating no technical issues stand in the way of compliance with the ABS HSNC Guide. Evaluation shall include a complete list of outstanding comments received from the plan review (cutters only).

Listings of Applicable CDRLs and DIDs for this Section

CDRL #	Title	Sub-Title	DID No.
SYE-001	System Engineering Management Plan (SEMP)		DI-MGMT-81024
SYE-002	Contract Work Breakdown Structure (CWBS)		DI-MGMT-81334C

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYE-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	System Engineering Management Plan (SEMP)
3. Subtitle (If Applicable).	
4. Authority.	DI-MGMT-81024
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-93xx
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

BLK11. Initially at System Development, or as appropriate for design modifications.

BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor activities and to monitor progress of contractor efforts.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYE-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Contract Work Breakdown Structure (CWBS)
3. Subtitle (If Applicable).	
4. Authority.	DI-MGMT-81334C
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	PRO, CG-93x
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Initially at System Development, or as appropriate for design modifications.
BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor activities and to monitor progress of contractor efforts.

Configuration Management (General Description)

Configuration Management is a field of management that focuses on establishing and maintaining consistency of a product's performance and its functional and physical attributes with its requirements, design, and operational information throughout its life.

The CG uses MIL-HDBK-61A as the basis for its management techniques for Configuration Management.

CONFIGURATION MANAGEMENT (CM)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure an effective CM program is fully incorporated into the System's acquisition.

2. Scope. The Contractor CM Program for the project will cover [name of Systems the USCG is acquiring].

B. Background

1. CM is the disciplined process for establishing and maintaining consistency of a System's performance, functional and physical attributes with its requirements, design and operational information throughout its life cycle and is an integral part of the SYE process. The USCG uses a configuration-based, maintenance driven, centralized supply approach to obtain life-cycle supportability. CM CDRLs identify the specific requirements needed to ensure the USCG knows exactly what product it has at any given point in time and what changes have been made to that product over its life cycle. CM can improve performance, reliability, maintainability and interoperability. It can also extend service life; reduce costs; reduce risk and liability; or correct defects. The lack of CM, or its ineffectual implementation will lead to uncontrolled increase in life cycle cost, failure to meet the operator's needs and potentially cause catastrophic consequences such as System failure or even loss of life.

2. The importance of accurately identifying data requirements and obtaining this data as specified is critical to effective CM. There are six functions of an effective CM program. These include:

   a. CM Life Cycle Management and Planning (used to determine CM roles and responsibilities, program costs, performance measures and a host of other planning factors).

   b. Configuration Identification (defines and approves product configuration and identifies the items to be controlled).

   c. Configuration Control (disciplined methodology for controlling changes and variances).

   d. CSA (historical record and data repository of a product's detailed configuration information).

   e. Configuration Verification and Audit (ensures the product is performing as requirements specify).

C. Definitions & Terms

1. Configuration Baseline (baseline)

   a. An agreed-to description of the attributes of a product, at a point in time, which serves as a basis for defining change.

(1) An approved and released document, or set of documents, each of a specific revision; the purpose of which is to provide a defined basis for managing change.

(2) The currently approved and released configuration documentation.

(3) A released set of files comprising a software version and associated configuration documentation. Configuration documentation formally designated by the government at a specific time during a CI's lifecycle.

b. Configuration baselines, plus approved changes to those baselines, constitutes the current approved configuration documentation.

2. Configuration Item (CI). A CI is an aggregation of hardware or software that satisfies an end use function and is maintenance worthy, engineering or logistics critical and is designated by the Government for separate CM. The CI is defined as the lowest repairable/replaceable unit within a System. CIs are developed, identified and described by their configuration baselines.

3. Master Equipment Configuration List (MECL). A technical and supply document prepared for an individual System which lists the equipment and components installed, associated on board repair parts, special tools, test equipment, miscellaneous portable items, and equipage required to perform its mission.

D. References

1. Configuration Management Guidance, MIL-HDBK-61A

2. National Consensus Standard for Configuration Management, ANSI/EIA-649-A

3. Standard for Software Configuration, Institute of Electrical and Electronic Engineers (IEEE) Standard 828-2005

E. Roles & Responsibilities

1. Configuration Management Plan (CMP). The contractor shall develop, establish, and maintain a CM program throughout the performance period for the [SYSTEM] contract that implements the guidance contained in MIL-HDBK-61A and ANSI/EIA-649-A. The contractor shall document the Configuration Management Program through a CMP that will demonstrate the contractor's plan for establishing and maintaining the hardware and software [SYSTEM] baseline configurations IAW CDRL CM-001. The portions of the CMP covering software shall be IAW IEEE Standard 828-2005.

2. The CMP shall describe the contractor's CM organization and shall identify contractor responsibilities, including subcontractors, in configuration planning, management, control, status accounting, and verification and audit, and to establish and maintain the functional, allocated, and product baselines for both hardware and software. The CMP shall describe how the contractor will ensure subcontractor/vendor compliance with the CM requirements of the contract.

3. The Contractor shall establish a configuration identification process and shall provide detailed information on CI identification procedures and processes to the Government in the CMP. The contractor shall include the following in the CI identification procedures.

a. The Contractor shall place the data under internal configuration control and shall maintain CSA information for each CI during the identification of each CI and throughout the CI's life cycle.

b. CIs may vary widely in complexity, size and type, from an aircraft, ship, electronic System or software program to a test meter or a round of ammunition. The Contractor shall identify and maintain CI information down to the Line Replaceable Unit (LRU) level or the lowest "maintenance worthy" level. Regardless of form, size or complexity, the contractor shall document and control the configuration of a CI and its associated attributes including its functional and physical characteristics.

c. CI selection separates System components into identifiable subsets for the purpose of managing further development. The contractor shall perform the CI selection IAW MIL-HDBK 61 (Series) and ANSI/EIA-649 (Series).

d. For configuration Identification, the contractor shall:

(1) Select CIs at appropriate levels of the product structure to facilitate the documentation, control and support of the items and their documentation;

(2) Determine the types of configuration documentation required for each CI to define its performance, functional and physical attributes, including internal and external interfaces;

(3) Determine the appropriate configuration control authority within the Contactor's organization for each configuration document consistent with logistics support planning for the associated CI;

(4) Create identifiers for the CIs and document the identifiers within the configuration documentation;

(5) Maintain the configuration identification of CIs to facilitate effective logistics support of items in service;

(6) Release configuration documentation; and

(7) Establish configuration baselines for the configuration control of CIs.

4. CSA Tasks. As part of the CM Program, the contractor shall conduct CSA IAW MIL-HDBK-61A to capture and maintain [SYSTEM] configuration information and ensure that current and historical configurations of the [SYSTEM] and the [SYSTEM] configuration information can be accurately determined throughout the performance period.

5. CSA Information. The Contractor shall develop and maintain a CSA database System containing all information necessary to fully describe each configuration item IAW CDRL CM-002. CDRL CM-002 contains an attached Excel file defining the minimum CM data elements.

a. The contractor shall establish the CSA System prior to the Preliminary Design Review (PDR), maintained during lead [System] construction, continued through the production contract, and shall provide all necessary information for a complete, accurate and verified "as delivered" configuration baseline for each [SYSTEM].

b. The contractor shall maintain change status for all CIs in the CSA System and reflect the current System/equipment configuration and ECP approval and implementation status.

c. The contractor shall operate and maintain a CSA database with a relational data structure documenting the configuration of the developmental, pre-product and product baselines, the configuration of each [System], and approved revised versions of each of these lists as they mature and change over the contract performance period.

d. The contractor shall develop the CSA database as a hierarchical configuration WBS using International Specification S1000D so that it contains all CI documentation that defines the [System].

6. The Functional Baseline (FBL), provided by the CG, consists of the [SYSTEM]'s technical, mission, cost, operational (including availability) and functional requirements, interoperability and interface characteristics, and the design constraints as contained in the performance spec and [SYSTEM] contract. It also contains the verification required to demonstrate those characteristics IAW MIL-HDBK-61A.

   The contractor will assist with the development of the FBL by incorporating documentation such as the capabilities development document (CDD) and System specifications. The contractor shall continue to update the FBL when the associated functional configuration documentation such as the [System] or System Specification, contract, etc., after the USCG has approved the initial FBL and after subsequent approval of changes to the FBL by the CG.

7. The Contractor shall identify and submit proposed CIs to the Government for review and approval as part of the Allocated Baseline (ABL) IAW CDRL CM-003.

   a. The contractor shall identify CIs for approval by the CG and maintain CIs approved by the CG that consist of configuration documentation and operational information. Configuration documentation consists of specification, interface document and design documentation such as technical manuals, engineering drawings and part lists. Operational information includes information needed to use, operate and maintain the product such as operating sequence Systems (OSS), and engineering operating sequence Systems (EOSS).

   b. Through the ABL, the contactor shall break out the functional requirements identified in the FBL into more detailed functional requirements and interface characteristics that are allocated from those of the higher level CI for the [System] and major subsystems. The contractor shall ensure that the ABL represents the performance-oriented requirements from the FBL, allocate their design characteristics to these performance-oriented requirements, and perform the verification required to demonstrate achievement of those specified characteristics. The contractor shall submit the ABL in phases to facilitate USCG review and approval. The contractor shall include the current approved performance oriented documentation governing the development of each CI in the ABL.

   c. The contractor shall establish the Product Baseline (PBL) upon approval of the PCA results and corrective action on the [SYSTEM] and meeting the approval of the KO. The contractor shall prescribe all necessary physical and form, fit, and function

characteristics of a CI, the selected functional characteristics designated for production acceptance testing, and the production acceptance test requirements.

8. Functional Configuration Audit. The contractor shall assist the government in preparing for and conducting a FCA. The contractor shall develop a FCA Plan IAW CDRL CM-004. The contractor shall provide at a minimum access to the [System] drawings and other technical data and provide [SYSTEM] SME personnel. The contractor shall record the minutes of the audit and report the results IAW CDRL CM-005. Discrepancies, if any, must be resolved to the satisfaction of the KO and the audit repeated for all affected items.

9. Physical Configuration Audit. The Government will conduct a PCA of the technical data as the last phase of the Preliminary Acceptance Trials (PAT) on the first [SYSTEM], and again on the [SYSTEM] designated by the KO. PAT is not complete for these Systems until all discrepancies resulting from the PCA have been resolved to the satisfaction of the KO. The contractor shall make provisions for and support this effort as described in the approved PCA Audit Plan.

   The contractor shall provide at a minimum access to the [System], drawings and other technical data and provide [SYSTEM] SME personnel. The contractor shall record the minutes of the audit and report the results IAW the approved PCA Audit plan [CDRL CM-006]. Discrepancies, if any, must be resolved to the satisfaction of the KO and the audit repeated for all affected items.

10. Configuration Control. The contractor shall control and maintain the configuration of the [System] throughout the performance period and shall ensure that the configuration baseline(s) is current and correct for all approved changes at all times. The Contractor shall not change an established configuration baseline without an approved ECP, or an approved RFD, issued by the KO in the form of a contract change.

    a. The contractor shall propose changes to the configuration baseline, in response to a request from the KO or on the Contractor's own initiative and expense, by submitting an ECP IAW the approved CMP and clause H.X (Need to verify Clause Number on each contract) and CDRL CM-007. The contractor shall address Class I and Class II ECPs, as defined in their proposed CM Plan IAW MIL-HDBK-61A. At the direction of the KO, in the form of a contract change, the contractor shall implement the Engineering Change.

    b. The contractor shall submit a NOR for approved ECPs as necessary IAW CDRL CM-007 in order to identify revisions to configuration documentation which require revision upon ECP approval.

11. Request for Deviation. The contractor shall request a deviation from a particular requirement of an item’s configuration baseline documentation, for the lead SYSTEM by submitting a RFD (CDRL CM-008). The RFD shall:

    a. Identify the affected item(s).

    b. Provide a detailed description of the difference between the configuration of the item and the configuration baseline document.

c. Provide justification for the deviation.

d. Provide a discussion of the consequences of approval including technical details explaining the degree of non-compliance and the effects on equipment or System operation constraints.

e. Describe how the deviation will be documented in the System's configuration documentation.

f. The Contractor shall implement the RFD only with the approval of the KO.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
CM-001	CM Plan		DI-CMAN-80858B
CM-002	Configuration Status Accounting Information.		DI-CMAN-81253A
CM-003	Configuration Item Documentation Recommendation	Allocated Baseline	DI-CMAN-81293 or equivalent
CM-004	Configuration Audit Plan		DI-SESS-81646
CM-005	Functional Configuration Audit Report (FCA).		DI-CMAN-81022C
CM-006	Physical Configuration Audit (PCA)		DI-CMAN-81022C
CM-007	Configuration Change Control		DI-CMAN-80639C; DI-CMAN-80642C
CM-008	Request for Deviation		DI-CMAN-80640C

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Configuration Management Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-CMAN-80858B
5. Contract Reference.	See SOW paragraph E.1.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify the DID as follows. Change DID reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004. Organize the plan according to Table A-3, Contractor CM Plan Content, in MIL-HDBK-61A. Add IEEE Standard 828-2005, Standard for Software Configuration Management Plans to Paragraph 2 under Requirements.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the Project Office or an organization designated by them.
BLK12&13. First submission shall be 45 days after contract award (DACA) with revisions as needed to manage the CM process.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Configuration Status Accounting Information.
3. Subtitle (If Applicable).	
4. Authority.	DI-CMAN-81253A
5. Contract Reference.	See SOW paragraph E.5.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 0

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows.

Change DID reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK 08. Government review and approval for technical content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Allow 30 days for Government comments.

BLK13. Monthly after final approval of initial submittal.

#	FIELD	TYPE	DESCRIPTION
1	Hierarchical Structure Code (HSC) Number	Alpha Numeric	HSC number assigned to each Item that defines its relationship to the rest of the overall System in terms boundaries, descriptions, and functional nomenclature. This is the data element to which the other data elements are tied to in the database.
2	Equipment/Item Functional Description	Alpha Numeric	Plain language functional description for the HSC Number.
3	Original Equipment Manufacturer (OEM) Equipment/Item Nomenclature	Alpha Numeric	OEM Name for the Item
4	Original Equipment Manufacturer (OEM) Equipment/Item Part Number (PN)	Alpha Numeric	A code used by the OEM to uniquely identify that Item used in a particular industry. Its purpose is to simplify referencing to that item.
5	Original Equipment Manufacturer (OEM) Equipment/Item Serial Number (SN)	Alpha Numeric	A unique number assigned by OEM for identification which varies from its successor or predecessor by a fixed discrete integer value.
6	Original Equipment Manufacturer (OEM) Commercial and Government Entity (CAGE) Code	Alpha Numeric	Alpha-numeric code that a unique identifier assigned to suppliers (to various government or defense agencies) as well as to government agencies themselves and also various organizations. CAGE codes provide a standardized method of identifying a given facility at a specific location.
7	Original Equipment Manufacturer (OEM) Name	Alpha Numeric	Plain language name of the OEM.
8	National Stock Number (NSN) / Navy Item Control Number (NICN)	Number	For NSNs, consists of a four digit Federal Supply Classification (FSC) Code followed by a nine digit National Item Identification Number (NIIN). The NIIN uniquely identifies the NSN in the Federal Supply distribution System. For NICNs, consists of four numerals in the first four positions. The next two positions consist of an alpha code that identifies the type of NICN. The last seven digits are alphanumeric characters that with the NICN code, uniquely identify each NICN item in the supply System.
9	Repairable Identification Code (RIC)	Alpha Numeric	Code assigned to uniquely identify a commodity. Allowance Parts List (APL) and Allowance Equipage List (AEL) are types of RICs.

#	FIELD	TYPE	DESCRIPTION
10	Repairable Identification Code (RIC) Nomenclature	Alpha Numeric	Nomenclature for the commodity assigned to the RIC
11	Concatenated Unique Item Identifier (UII) Required	One Digit (Y/N)	Delineates whether the CI requires a Unique Identifier IAW Coast Guard Property Manual, COMDTINST M4500 (series).
12	Concatenated Unique Item Identifier (UII)	Alpha Numeric	Number constructed by contractor to uniquely identify each CI deemed required to have a UII using one of any accepted Constructs as shown in Coast Guard Property Manual, COMDTINST M4500 (series).
13	Mission Criticality Code (MCC)	Alpha Numeric	Indicates mission impacts if the end item is rendered inoperable. T- temporary code used since no CASREP data is available; Z- configuration record contains incomplete data; 1- minor degradation; 2- severe degradation of secondary mission; 3- severe degradation of primary mission; 4- Total loss or severe degradation of propulsion.
14	Military Essentiality Code	Numeric	Number used to identify the importance of a part to a System. 1- Failure will render the System inoperable; 3- Failure will not render the System inoperable; 5- Required for personal safety; 7 - Required to prevent temporary reduction of operational effectiveness.
15	Valve Mark/Electronic Symbol	Alpha Numeric	If applicable
16	Sub-Category Code (SCAT)	Numeric	If applicable. SCAT codes are four-digit subcategory codes used to identify a range of measurements by functional category. Test equipment is assigned SCAT codes in the 4000 - 4999 series of numbers. SCAT codes are normally used wherever references are made to test equipment.
17	Unit Identification Code	Alpha Numeric	Identifies organization entities within Coast Guard
18	Government Furnished Equipment (GFE)/Contractor Furnished Equipment (CFE)	Alpha Numeric	Delineates whether the Item is Government Furnished (GF) or Contractor Furnished (CF)
19	Install Status Code	Alpha Numeric	Code that delineate status of item's installation

#	FIELD	TYPE	DESCRIPTION
20	Validation Source/Action Code	Alpha Numeric	Code that delineates whether equipment/item is an Add, Revision, Delete, or not validated (for specified reasons) due to validation
21	Unit Cost	Number	Unit Cost in whole US Dollars
22	Date	Date Field (MM/DD/YY)	Date record was established in CSA data base
23	Revision	Alpha Numeric	A letter designation for each revision to the CI entry (e.g., first revision would be “A”, then “B”, etc.)
24	Quantity	Number	The quantity of the Item to be installed.
25	Location	Alpha Numeric	Provides the physical location of the Item (i.e., compartment number, etc)
26	Version Number	Alpha Numeric	Version number of software if applicable
27	Lot Number	Alpha Numeric	Lot number if applicable/known
28	Government Design Source Standard Drawing	Alpha Numeric	Government Furnished drawing that identifies the requirement for the Item (if any)
29	Parent Hierarchical Structure Code (HSC)	Alpha Numeric	HSC number assigned to Next Higher Assembly (NHA).
30	Parent Equipment/Item Functional Description	Alpha Numeric	Plain language functional description for the NHA of the Item.
31	Parent Equipment/Item Nomenclature	Alpha Numeric	Plain language description of the NHA of the Item. Until the product baseline is determined this will be a functional description of the equipment
32	Parent Equipment/Item Part Number (PN)	Alpha Numeric	Part number for the NHA of the Item.
33	Parent Equipment/Item Serial Number (SN)	Alpha Numeric	Serial number for the NHA of the Item.
34	Parent Repairable Identification Code (RIC)	Alpha Numeric	RIC number for the Parent commodity
35	Parent Repairable Identification Code (RIC) Nomenclature		Nomenclature for the Parent commodity

#	FIELD	TYPE	DESCRIPTION
36	Amplifying Information	Variable	As required
37	Alteration Identification Number	Alpha Numeric	Number assigned to package that is for any change in the hull, machinery, equipment, or fittings that involves a change in design, materials, number, location, or relationship of any assembly's component parts whether the change is separate from, incidental to, or in conjunction with repairs.
38	Alteration Repairable Identification Code (RIC)	Alpha Numeric	RIC number for the Alteration
39	Alteration Status Code	Alpha Numeric	Code that defines status of Alteration
40	Alteration Type	Alpha Numeric	Code that defines type of Alteration

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Configuration Item Documentation Recommendation
3. Subtitle (If Applicable).	Allocated Baseline
4. Authority.	DI-CMAN-81293 or equivalent
5. Contract Reference.	See SOW paragraph E.7.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	One/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 0

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows.

Change DID reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK 08. Government review and approval for technical content, completeness, format and clarity.

BLK12. Allow 30 days for Government comments.

BLK13. Submits changes/updates monthly until completion of PCA.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Configuration Audit Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-SESS-81646
5. Contract Reference.	See SOW paragraph E.8.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	A
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	TWO
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows. Change reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK12. Submission of Audit Plan is due one month prior to the scheduled Configuration Audit. Government will provide comments within 14 days.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-005
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Functional Configuration Audit Report (FCA).
3. Subtitle (If Applicable).	
4. Authority.	Configuration Audit Summary Report (DI-CMAN-81022C PCA)
5. Contract Reference.	See SOW paragraph E.8.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	A
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	One/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows. The FCA report shall be based on configuration baseline current as of the date of the audit. In an executive summary, specifically highlight any discrepancies found between the data and the System. Provide a recommended resolution for each. Change reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK12. First submission of Report is due 14 calendar days after the conclusion of the audit. Government will provide comments within 14 days.

BLK 13. Government will provide comments within 10 days.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-006
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Physical Configuration Audit (PCA)
3. Subtitle (If Applicable).	
4. Authority.	Configuration Audit Summary Report (DI-CMAN-81022C PCA)
5. Contract Reference.	See SOW paragraph E.9.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	A
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	One/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows. The PCA report shall be based on configuration baseline current as of the date of the audit. In an executive summary, specifically highlight any discrepancies found between the data and the boat. Provide a recommended resolution for each. Change reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK12. First submission of Report is due 14 calendar days after the conclusion of the audit. Government will provide comments within 14 days.

BLK 13. Government will provide comments within 10 days.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-007
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	6
2. Title of Data Item.	Configuration Control (ECP)
3. Subtitle (If Applicable).	
4. Authority.	Engineering Change Proposal (ECP) (DI-CMAN-80639C)
5. Contract Reference.	See SOW paragraph E.10.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	30 DARC
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify DID as follows. Replace all references of DID version "B" with version "C". Change reference from MIL-HDBK-61 to MIL-HDBK-61A and ANSI/EIA-649-1998 to ANSI/EIA-649A-2004. DD Form 1692 is required to be submitted with every ECP, in addition to any other documentation required for ECPs.

BLK08. Government review and approval for technical content, completeness, format and clarity. Allow 30 days for Government review and approval. Upon ECP approval, Contractor shall submit NOR if appropriate, within 30 days after ECP implementation.

BLK 12. Submit 30 days after each need is identified. Allow 30 days for review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CM-008
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Request for Deviation
3. Subtitle (If Applicable).	
4. Authority.	DI-CMAN-80640C
5. Contract Reference.	See SOW paragraph E.11.
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	ASREQ, See Block 16
13. Date of Subsequent Submission.	30 DARC, See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. In addition to information required in paragraph 2 of DID submit DD Form 1694 with every RFD. Change DID reference from ANSI/EIA-649-1998 to ANSI/EIA-649A-2004.

BLK08. Allow 30 days for Government review and approval.

BLK10. As the need for deviation is identified.

Integrated Logistics Support (General Description)

Integrated Logistics Support (ILS) is a technique to ensure that the supportability of a System is considered during its design and development. The aim of ILS is to address three aspects of supportability during the acquisition and whole life cycle of the equipment.

1. Influence on Design. This is an iterative process during the design of the equipment to ensure that supportability aspects are adequately addressed. This ensures that user maintenance and routine servicing tasks can be performed with sufficient ease, and that utilization of existing tools and techniques is maximized. Further, it may be required to demonstrate supportability of the equipment during logistics supportability demonstrations to ensure that supportability has been adequately addressed.

2. Design of the Support Solution. Ensuring that the Support Solution considers and integrates the elements considered by ILS.

3. Initial Support Package. These tasks include calculation of requirements for spares, special tools, and documentation. Quantities required for a specified initial period are calculated, procured, and delivered to support delivery, installation in some cases, and operation of the equipment.

The ILS management process facilitates specification, design, development, acquisition, test, fielding, and support of Systems.

INTEGRATED LOGISTICS SUPPORT (ILS)

A. General Overview

1. Purpose. This section specifies the performance requirements the contractor shall fulfill to ensure the contractor implements an ILS program that ensures [SYSTEM] supportability criteria and characteristics are integrated equally and thoroughly into the [SYSTEM] design, Systems integration, construction, testing, and life cycle support planning.
2. Scope. The ILS program for the project will cover all Systems being acquired.

B. Background

ILS includes:

1. Maintenance Planning.
2. Manpower and Personnel.
3. Supply Support.
4. Technical Data.
5. Support and Test Equipment.
6. Training and Training Support.
7. Computer Resources Support.
8. Facilities.
9. Packaging, Handling, Storage and Transportation.
10. Design Interfaces.

C. Definitions & Terms

1. Contractor Furnished Equipment (CFE). CFE is the equipment furnished by the Contractor for installation.
2. Government Furnished Equipment (GFE). GFE is the equipment furnished by the Government for Contractor installation.

D. References

DoD Handbook Acquisition Logistics, MIL-HDBK-502

Handbook Acquisition Logistics, MIL-PRF-49506

Systems Integrated Logistics Support (SILS) Policy Manual, COMDTINST M4105.8 (series)

DoD Guide for Achieving Reliability, Availability, and Maintainability, dated 03 August 2005

Major Systems Acquisition Manual (MSAM), COMDTINST M5000.10 (series)

CG Training System Standard Operating Procedures

E. Roles & Responsibilities

1. Quarterly Integrated Logistics Support Meetings. The Contractor shall host Quarterly ILS meetings in conjunction with the Quarterly Production Progress Conferences (QPPCs). The contractor shall provide minutes IAW CDRL ILS-001. These meetings shall cover at a minimum the following:

   CSA
   RMA
   MPA
   SUS
   Provisioning Technical Documentation
   Outfitting and Spares
   Technical Data
   Equipment Technical Manuals
   System and SYSTEM Information Books & Manuals
   Drawings
   HSI
   SUE
   FAC
   PHS&T
   Design Interface
   CRS

2. Integrated Support Plan (ISP). The contractor shall develop and deliver an ISP IAW CDRL ILS-002. The ISP shall describe the contractor's plans, policies, procedures and responsibilities for providing data and tasks for logistics support for the [SYSTEM], and contractor internal controls that will be employed to ensure quality products are provided and schedules are met. The contractor shall develop the ISP for both CFE and GFE. The contractor shall make maximum use of existing CG or DOD logistics support resources to provide maximum commonality and to reduce new ILS requirements and life-cycle costs. The contractor shall use DoD Handbook, Acquisition Logistics, (MIL-HDBK-502) and MIL-PRF-49506 in developing this plan.

3. The Contractor shall recommend and develop logistics support for each ILS element consistent with each other and consistent with the [SYSTEM]'s operational and maintenance requirements, DoD Guide for Achieving Reliability, Availability, and Maintainability, and Maintenance Planning in the ISP.

4. The Contractor shall detail the method of integrating availability and maintainability considerations to produce cost-effective support for the [SYSTEM] in the ISP.

5. The contractor shall document in the ISP the use of an iterative SYE approach that will ensure the logistics data products are continually updated and reflect the configuration of the [SYSTEM] as designed and delivered. The contractor shall ensure the ILS Program closely integrates with the RMA analysis. In developing the ILS Program, the contractor shall document that the contractor fully considered all mission constraints, the availability profile, and the areas of operations.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
ILS-001	Conference Minutes	Quarterly Integrated Logistics Support Meeting Minutes	DI-ADMIN-81250A or equivalent
ILS-002	Integrated Support Plan (ISP)		DI-ILSS-80095

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-ILS-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Conference Minutes
3. Subtitle (If Applicable).	Quarterly Integrated Logistics Support Meeting Minutes
4. Authority.	DI-ADMIN-81250A or equivalent
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	30 Days after Conference
13. Date of Subsequent Submission.	60 Days after receipt of comments
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Allow 90 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-ILS-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	
3. Subtitle (If Applicable).	Integrated Support Plan (ISP)
4. Authority.	DI-ILSS-80095
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	90 DACA
13. Date of Subsequent Submission.	ANNLY
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. The ISP shall describe the contractor's plans for the management, control, execution, interface and integration of all aspects of the ILS Program IAW MIL-HDBK-502 and MIL-PRF-49506.

Change reference in paragraph 7.2 from DOD-STD-1702(NS) to MIL-HDBK-502 and MIL-PRF-49506.

BLK 08. Government review and approval for content, management approach, and completeness. Allow 45 days for Government review.

Supportability Analysis (General Description)

The Supportability Analysis section, previously known as LSA, specifies the analytical process that identifies System supportability requirements, the resources needed to effect sustained support, procedures for accomplishing System support tasks, and the appropriate level at which individual support tasks should be accomplished. These CDRLs will be used when developing SOWs for Supportability Analysis.

SUPPORTABILITY ANALYSIS (SUA)

A. General Overview

1. Purpose. This section specifies the performance requirements the contractor shall fulfill to ensure the contractor gathers appropriate data for creating logistics reports.
2. Scope. The SUA for the project will cover all Systems being acquired.

B. Background

SUA is the process of gathering engineering and logistics data information from all areas of acquisition, for use in creating logistics analyses and plans. It is the foundation of all logistics efforts. It starts at the very outset of the acquisition process, and continues until the System is transferred to USCG support.

C. Definitions & Terms

Logistics Management Information (LMI). LMI is the information that feeds SUA, and is developed into LMI Data Products.

D. References

Performance Specification, Logistics Management Information, MIL-PRF-49506

E. Roles & Responsibilities

1. Logistics Management Information. The contractor shall develop and deliver LMI IAW MIL-PRF-49506, “Performance Specification and LMI”. The government shall have the right to review and approve the data, and have viewing rights into the database at the government's discretion.
2. Logistics Management Information Summaries (LMIS). LMIS will be developed and delivered IAW CDRL SUA-001. The Government shall have full access to all LMIS data and summaries at all times, via electronic means.
3. Logistics Management Information Data Products (LMIDP). LMIDP will be developed and delivered IAW CDRL SUA-002. The Government shall have full access to all LMIDP data products at all times, via electronic means.
4. Supportability Analysis Program Plan (SAPP). The contractor shall develop and deliver a SAPP. The SAPP shall identify the tools, process and procedures for conducting SUA. The plan shall be delivered IAW CDRL SUA-003.

Listings of Applicable CDRLS and DIDs for this Section.

CDRL #	Title	Sub-Title	DID No.
SUA-001	Logistics Management Information Summaries (LMIS)	None	DI-ALSS-81530
SUA-002	Logistics Management Information Data Products (LMISDP)	None	DI-ALSS-81529
SUA-003	Management Plan	Supportability Analysis Program Plan (SAPP)	DI-MGMT-80004A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUA-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Logistics Management Information Summaries (LMIS)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-ALSS-81530
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	ALC, SFLC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See BLK 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUA-002
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Logistics Management Information Data products (LMISDP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	ALC, SFLC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See BLK 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SDD first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUA-003
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	Supportability Analysis Program Plan (SAPP)
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See BLK 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Modify the DID as follows.

Replace paragraph 3 with.

3.1 SUA Program Description. A description of how the SUA program will be conducted to meet the System and logistics requirements contained in the applicable project documents.

3.2 SUA Tasks. Identification of each SUA task that will be accomplished and how each will be performed. Identification of the major tradeoffs to be performed.

3.3 Scheduling. A schedule with estimated start and completion points for each SUA program activity or task. Schedule relationships with other ILS program requirements and associated SYE activities shall be identified.

3.4 SUA Candidate List. A list of SUA candidates which includes Item Name, NSN, PN, and Contractor and Government Entity code, and applicable selection criteria. The list shall include all items not recommended for SUA and appropriate rationale for non-selection.
3.5 SUA Number System. Explanation of the SUA control numbering System to be used.
3.6 SUA Data Updates and Validation. Procedures for updating and validating SUA data, to include configuration control procedures for SUA data.

3.7 SUA Data Collection. Description of the SUA data collection process and the automated data processing System to be used. BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review. BLK 12. First submission of the SAPP shall be made prior to the PDR.

Reliability, Availability and Maintainability (General Description)

Reliability, Availability and Maintainability is a set of requirements imposed on a System to ensure that it (1) will be ready for use when required, (2) will successfully perform assigned or designed (intended) functions, and (3) can be maintained in its operational state over its specified useful life.

RELIABILITY, AVAILABILITY AND MAINTAINABILITY (RAM)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure the contractor develops and provides RAM information and data.
2. Scope. The RAM program for the project will cover all Systems being acquired.

B. Background

1. Design criteria needs to be established to minimize the maintenance labor-hours required to achieve the required availability for the [SYSTEM] and to achieve the desired operational availability.
2. The design criteria shall include visual and physical accessibility, adequate workspace, work clearance for maintenance, compatibility with ATE, training requirements, and SUE (including calibration if applicable).

C. Definitions & Terms

1. Failure. Any malfunction or combination of malfunctions that prevent an equipment/System from operating in one or more modes of operation IAW the performance requirements.
2. Critical Failure. Any failure that prevents the [SYSTEM] from performing an assigned primary mission.
3. Major Failure. Any failure that degrades operational capability or mission accomplishment.
4. Non-failure. Any malfunction or combination of malfunctions that is not classified as a failure.
5. Maintainability. The ability of an item to be retained in or restored to a specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair.
6. Mean Time Between Failure (MTBF). The mean number of life units (hours) during which mission essential parts of the item perform within their specified limits under stated conditions. Only corrective maintenance failures are considered when calculating the MTBF value.
7. Mean Time Between Critical Failure (MTBCF). The mean number of life units (hours) of a critical item which fail and prevents the [SYSTEM] from performing its primary missions.
8. Mean Logistics Delay Time (MLDT). The mean time spent waiting for parts or supplies required to correct a failure.
9. Mission Critical Equipment. Equipment that contributes to the functional tasks of at least one of the primary mission areas.

10. Mean Time To Repair. The average corrective maintenance time required to correct a failure, restoring the equipment to a fully operational state. MTTR does not include downtime periods due to preventive maintenance time, logistics delay time or administrative delay time.

11. Operational Availability. The probability that the [SYSTEM] is able to fulfill primary mission requirements at any random point in time.

12. Primary Missions. Primary mission requirements include Enforcement of Laws and Treaties (ELT). International/Domestic Living Marine Resources Enforcement, Drug Interdiction, and General Law Enforcement as well as Search and Rescue. General Law Enforcement includes Alien Migrant Interdiction Operations (AMIO), Boating While Intoxicated Enforcement (BWI), Recreational and Commercial Marine Safety, Pollution Prevention and Violation Enforcement, and protection of Marine Sanctuaries.

13. Reliability. The probability that an item can perform its intended function for a specified period under stated conditions.

D. References

1. IEEE Std 1332-1998
2. IEEE Standard Reliability Program for the Development and Production of Electronic Systems and Equipment
3. Reliability Program Standard, SAE International JA 1000
4. Surface Vehicle/Aerospace Recommended Practice Reliability Program Standard Implementation Guide, SAE International JA 1000-1
5. DoD Guide for Achieving Reliability, Availability and Maintainability, dated August 3, 2005

E. Roles & Responsibilities

1. The contractor shall plan, prepare, and conduct a design RAM Analysis that verifies the allocated subsystem and equipment RAM requirements satisfy the System RAM requirements. The contractor shall prepare and deliver the RAM analysis IAW CDRL RAM-1.

2. The contractor shall perform the RAM analysis using an appropriate RAM handbook as a guide, such as, IEEE Standard Reliability Program for the Development and Production of Electronic Systems and Equipment, IEEE STD 1332-1998; or SAE International JA 1000, Reliability Program Standard and SAE International JA 1000-1, Surface Vehicle/Aerospace Recommended Practice Reliability Program Standard Implementation Guide. Additional guidance on the RAM process may be found in DoD Guide for Achieving Reliability, Availability and Maintainability, dated August 3, 2005. The contractor will ensure the RAM:

   a. Addresses all mission critical Systems and equipment.

   b. Provides the MTBF and MTTR for the major components of each mission critical System/equipment.

c. Provides a graphical reliability block diagram identifying components, redundancy, MTBF, and MTTR characteristics. The reliability block diagram shall be prepared to show concise visual shorthand of the various series-parallel block combinations (paths) of components that are required for mission success. The reliability block diagram shall provide the basis for accurate mathematical representation of Mission Reliability and Operational Availability.

d. Provides a basic and mission reliability prediction.

e. Provides an [SYSTEM] mission operational availability prediction, utilizing a graphical reliability block diagram configuration and composite mission profile acceptable to the CG's Engineering Technical Authority.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
RAM-001	Reliability, Availability and Maintainability (RAM) Program Plan		DI-XXXX-00000 (New DID)
RAM-002	Technical Report - Study/Services	Reliability, Availability and Maintainability (RAM) Analysis	DI-MISC-80508A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-RAM-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Reliability, Availability and Maintainability (RAM) Program Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-XXXX-00000
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG APO or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

BLK 12. First submission of the SAPP shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-RAM-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Reliability, Availability and Maintainability (RAM) Analysis
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, PRO, APO
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Develop and provide information and data IAW the ILS Specification.

BLK 08. Government review and approval for technical content, completeness, format and clarity.

BLK 12. First submission of the SAPP shall be made prior to the PDR.

BLK 13. Final submission shall be submitted 120 DACDR. Revisions shall be submitted as required by availability of additional data. Allow 30 days for Government review.

Maintenance Planning (General Description)

1. Maintenance planning begins early in the acquisition process with development of the maintenance concept and requirements for the life of the System. It includes, but is not limited to. levels of repair; repair times; testability requirements; support equipment needs; training; manpower skills; FAC; inter-service, organic, and contractor mix of repair responsibility; site activation; development of reliability-centered preventive maintenance Projects; and sustainment. This element has a great impact on the planning, development, and acquisition associated with the other logistics support elements. Maintenance planning relies on LORA as a function of the System acquisition process.

2. MPA is the process conducted to develop and establish maintenance and support concepts and requirements for the lifetime of the system. It answers questions such as the following. What can go wrong? Who will fix it? Where will it be fixed? How will it be fixed? When will it be fixed? An acquisition Project should establish logistics support/maintenance plans throughout the development process, with life-cycle costs playing a key role in this process. MPA includes supportability analysis which consist of RAM analysis, Failure Modes, Effect and Criticality Analysis, Reliability Centered Maintenance Analysis, Task Analysis, and LORA. Support/maintenance concepts should reflect the optimum balance between readiness and life-cycle cost. MPA is the logical starting point in addressing the logistics elements. If the maintenance plans changes, chances are that many of the other logistics elements will also change.

MAINTENANCE PLANNING (MPA)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure the contractor translates the maintenance approach delineated in the [SYSTEM] maintenance concept into the maintenance task requirements that will ensure the ongoing availability of the [SYSTEM].

2. Scope. The MPA program for the project will cover all Systems being acquired.

B. Background

1. MP is the cornerstone of the ILS program. MPA defines requirements for virtually all logistics support resources and service (e.g., repair parts, support equipment, training). These requirements are defined by the SUA.

2. This section briefly describes the CG's maintenance concept for the [SYSTEM]. This concept shall be applied when designing the [SYSTEM] and its support Systems**.** The [SYSTEM] will be maintained using existing CG, commercial, and OGA FAC. [SYSTEM] COs have the overall responsibility for scheduling maintenance for their individual [SYSTEM] **(cutters only)**.

3. Each [SYSTEM] crew, while in port, will perform preventive and minor corrective maintenance as operational conditions permit and IAW the Naval Engineering Manual, COMDTINST M9000.6 (series), dated 21 October 2004, and the Electronics Manual, COMDTINST 10550.25 (series), dated 3 May 2007. **(cutters only)** [Aircraft squadron personnel will perform preventive and corrective maintenance to the extent defined by the Aeronautical Engineering Manual, COMDTINST M13020.1 (series), dated 1 April 2003.] In addition, maintenance will be performed by [SYSTEM] crews/squadrons, other support organizations, and commercial sources during scheduled maintenance periods.

4. Bi-Level Maintenance. The objective of maintenance is the preservation of inherent design levels of reliability, performance, and safety at the minimum practical costs. All CG Systems require some form of scheduled and unscheduled maintenance. To maintain CG equipment in the highest state of readiness, consistent with program goals, and to ensure maximum effective use of resources, a bi-level System of maintenance support has been devised. Organizational and Depot. The complexity and magnitude of the requirements for the maintenance event, as defined by the LORA, determines at what level within the bi-level System the event is performed. The overall operation and sustainment support philosophy for the [SYSTEM] System is for CG organic logistics support to provide total or near total organizational-level maintenance support.

C. Definitions & Terms

1. Scheduled Maintenance is that which is routinely scheduled for the purpose of preventing equipment and System failures by providing Systematic inspection, testing, monitoring, lubrication or replacement of components.

2. Unscheduled Maintenance is that which repairs failures to equipment, Systems, hull, structure, etc. Casualties requiring unscheduled maintenance are random in both time and severity.
3. Facility Maintenance is that which, for cutter and boats, preserves the hull and superstructure, their structure, fittings, protective and decorative coverings. For FAC, facility maintenance is that which preserves the facility. Such maintenance includes basic housekeeping.
4. Organizational Level Maintenance. The minimum maintenance for accomplishment by the operational unit's organizational personnel. Organizational level maintenance is performed on the end item/equipment/system and is designed to accomplish those maintenance items that can be accomplished in the shortest amount of time to maximize operational availability of the system/equipment. Operating units are responsible for completing all organizational-level planned and corrective maintenance. Typical maintenance items falling under this category involve.
    a. All planned maintenance except that requiring tools or other resources not held on board the organizational unit, or that requiring technical skills of personnel beyond those available in the operational unit’s crew.
    b. All facility maintenance except that requiring resources or skills beyond that normally available to the unit. **(Cutters and boats only)**
    c. All corrective maintenance except that requiring tools, parts, or other resources not held by the operational unit or that requiring technical skills of personnel beyond those available in the operational unit’s crew.
5. Depot Level Maintenance. Maintenance performed on equipment or material requiring major overhaul or a complete rebuild of parts, assemblies, subassemblies, and end items, including the manufacture of parts, modifications, testing, and reclamation. Typically, maintenance items in this category can be performed only during a dry-docking or dock-side availability **(cutters only)**, or they involve the removal of the affected equipment from the System for repair in an industrial or commercial facility ashore. For cutters and electronic equipment, depot-level maintenance represents the vast majority of conventional maintenance, repair, and alterations beyond the organizational level capability. Typical maintenance items falling under this category involves.
    a. All planned maintenance requiring major hull repairs, application or removal of major flooring or coating Systems, and periodic major System or equipment overhauls or maintenance that may require the removal of the affected equipment from the System for repair in an industrial facility ashore.
    b. Facility maintenance requiring resources or skills beyond that normally available to the unit and not assigned at the organizational-level. **(cutters only)**
    c. Corrective maintenance requiring overhaul or replacement of major components (main engines, marine gears, etc.) requiring resources or skills beyond that normally available to the unit and not assigned at the organizational-level.

6. Modular Design. A design approach that adheres to four fundamental tenets of cohesiveness, encapsulation, self-containment, and high binding to design a System component as an independently operable unit subject to change.
7. Modular Open Systems Approach. An integrated business and technical strategy that employs a modular design and, where appropriate, defines key interfaces using widely supported, consensus-based standards that are published and maintained by a recognized industry standards organization.

E. References

1. Naval Engineering Manual, COMDTINST M9000.6 (series)
2. Electronics Manual, COMDTINST 10550.25 (series)
3. Aeronautical Engineering Manual, COMDTINST M13020.1 (series)
4. MIL-P-24534A Notice 1 dated 21 March 1995

F. Roles & Responsibilities

1. The Contractor shall integrate maintenance planning with the [SYSTEM] design, reliability and maintainability, failure modes and effects analysis, reliability centered maintenance analysis, level of repair analysis, corrective maintenance task analysis, manpower optimization, human performance factors, material selection, and other logistics processes.
2. The Contractor shall design and construct the [SYSTEM] to minimize maintenance requirements. During the design phase, the contractor shall consider and apply the principles of the MOSA to effect optimized maintenance requirements. These requirements shall not supersede specific performance, design, construction, or warranty requirements.
3. The Contractor shall use condition-based maintenance to the maximum extent practicable. During [SYSTEM] design, the Contractor shall conduct trade-off analyses to determine the most effective approach to maintenance to include the following considerations.
   a. Labor and cost savings due to automated and self-diagnostic equipment, BIT/BITE. The Contractor shall identify the expected life cycle of automated and self-diagnostic equipment including the estimated cost for replacement of the equipment at the end of its life cycle. When considering alternatives, the Contractor shall give preference to equipment that provides exportable data that supports trend analysis at a CG engineering facility.
   b. The Contractor shall provide for diagnostic capabilities for engines. Data shall be exportable and conform to a non-proprietary standard. The capabilities required to review data at a CG engineering facility shall be provided. Capabilities shall support trend analysis used to forecast remaining engine service, life, minimize depot maintenance requirements and satisfy performance criteria. Engine overhauls shall be depot maintenance. Existing CG engine diagnostic capabilities shall be

considered as an alternative. Preference shall be given for equipment that reduces fuel cost and environmental impacts.

c. The Contractor shall consider the use of predictive maintenance technologies during design. The Contractor shall consider technologies currently supported by the CG during design and as alternatives; information describing test equipment may be obtained from the CG Logistics Centers. Table MPA-1 is a list of existing CG maintenance technologies.

d. MOSA to optimize maintenance. Hull access routes shall be provided for all items that are replaced as modules or repaired at the depot level. Access routes for modular items shall not require cutting or welding the hull structure. **(cutters and boats only)**

e. Labor and cost savings due to modular replacement equipment (versus piece-part repair).

f. Labor and cost savings due to reduced SYSTEM facility maintenance with increased corrosion resistance.

4. Operational and maintenance functions required for the [SYSTEM] shall be identified for each item to be incorporated at the level of detail of the Configuration Item Line Replaceable Unit (CILRU), defined and developed IAW CDRL MPA-001.

5. The Contractor shall divide the [SYSTEM] SUA Review process into three distinct Review Points (RP's) as defined by CDRL MPA-001. They are Government Review Points.

   a. RP-1 – Review of Failure Modes and Effects Analysis (FMEA), prior to advancing to Phase 5.

   b. RP-2 – Review of Maintenance Requirements Index, prior to advancing to Phase 9.

   c. RP-3 – Review and acceptance of MPCs and SUA based sparing recommendations.

6. The Contractor shall provide a LORA IAW DoD OPNAVINST 4410.2A and MIL-PRF-49506 to determine O and D level maintenance tasks, and CDRL MP-002. The Contractor shall document the SM&R Codes in the SUA database, as part of the LORA analysis.

7. The Contractor shall conduct a maintenance task analysis which documents both preventive and corrective maintenance requirements for organizational- and depot-levels IAW CDRL MPA-001.

   Maintenance task analysis shall include the following:

   a. Inspection and test tasks.

   b. Remove and replace tasks.

   c. Fault locate/fault isolate tasks to include the use of BIT/BITE.

   d. Disassemble/reassemble tasks for depot-level overhaul.

8. The contractor shall develop maintenance requirements using RCM methodology IAW MIL-P-24534A Notice 1 dated 21 March 1995 and document all information, decisions

and provide data deliverables IAW CDRL MPA-001. Personnel developing these requirements shall hold a current NAVSEA RCM Level II Certification.

9. The contractor shall develop maintenance planning documentation for newly developed equipment, for in-service equipment for which the support concept has been significantly changed, and for any commercial equipment for which organic logistics is expected. The contractor shall document the results of the maintenance planning analysis in a SUA database that conforms to MIL-PRF-49506. The government shall have the right to review and approve the data, and have viewing rights into the database at the government's discretion.

10. Planned Maintenance System (PMS). For each organizational-level maintenance requirement identified, for both preventive and corrective, the Contractor shall develop maintenance task procedures as defined by CDRL MPA-001. This shall include both scheduled and unscheduled maintenance tasks for all levels of maintenance.

11. MPC shall be developed for organizational level preventive and corrective tasks and for depot-level preventive and corrective tasks. The MPCs shall be provided based on RCM recommendations and task analysis results IAW MIL-P-24534A Notice 1 dated 21 March 1995 and CGTO PG-85-00-230-S.

12. Corrective maintenance responds to failures that have occurred and restores the System to operational condition. Each assembly, subassembly, and component in the top-down breakdown structure may have multiple tasks. For each maintenance task, the following information shall be identified:

    a. Task frequency in terms of annual occurrences.

    b. Task duration and maintenance burden.

    c. Support and test equipment required.

    d. Spare parts likely to be replaced during a repair task.

    e. Performing personnel and level of maintenance.

    f. PHS&T requirements.

    g. Environmental impacts, including HAZMAT.

    h. Facility requirements, if needed.

    i. Procedural steps.

13. The Contractor shall validate the information contained within the MPC through performance of operations and maintenance tasks on installed [SYSTEM] Systems/equipment. The Contractor shall coordinate the validations with other SYE tests and demonstrations, as applicable.

14. The Contractor shall create a Maintenance Requirements List IAW CDRL MPA-003.

15. RCM Conferences.

    a. The contractor shall address RCM progress and issues as an agenda item at the ILS progress meetings.

b. Audit and preparation of the maintenance requirements (phase 7 MIL-P-24534A PMS). When phase 6 of the analysis is complete the RCM data package will be presented at a RCM Guidance Conference. The purpose of this conference is to deliver the RCM analysis to the CG and to define the maintenance procedure development effort. The scope of the conference may be the entire platform or an incremental data delivery, but the entire platform will be addressed.

Table MPA-1. Existing Coast Guard Maintenance Technologies

Technology	**Brief Description**	**Coast Guard Manager**
Video Imaging	This technology is used to inspect the interior of shipboard components by inserting a small optical device through an opening. It is also referred to as "borescope".	SFLC
Vibration Analysis	This technology is used to identify current machine condition using vibration data. Data is collected by a portable data collector and uploaded to a computer where software completes an analysis.	SFLC
Ultrasonic Test/Inspection	This technology is used to measure material thickness, fluid flow or structural integrity.	SFLC
Diesel Engine Condition Monitoring	These technologies are used to diagnose diesel engine System condition. Vibration, pressure and speed data is collected to describe the machine's condition.	SFLC
Motor Circuit Signature Analysis	This technology is used to identify the current (AMPs, Voltage, and phase) flowing though the circuit and is used to assess the machine's condition.	SFLC
Thermal Imaging	This technology is used to take infrared images of machines or electrical circuits and used to assess equipment condition.	SFLC
Program Logic Controllers	This technology is used to control machines or Systems. The SFLC has the capability to reprogram PLCs.	SFLC
Corrosion Control Mapping	This technology is used to transfer corrosion or structural data to the CG IT System. Technicians mark up data collection sheets and then the marked up image is scanned and aligned electronically with a database image. The technology supports cross platform analysis.	ALC

Listings of Applicable CDRLS and DID for Maintenance Planning

CDRL #	Title	Sub-Title	DID No.
MPA-001	Planned Maintenance System (PMS) Master System and Subsystem Index		DI-SESS-80979
MPA-001	Planned Maintenance System (PMS) Failure Modes and Effects Analysis (FMEA)		DI- SESS -80980
MPA-001	Planned Maintenance System (PMS) Functional Failure Analysis (FFA)		DI- SESS -80981
MPA-001	Planned Maintenance System (PMS) Functionally Significant Items (FSI) Index		DI- SESS -80982
MPA-001	Planned Maintenance System (PMS) Additional Functionally Significant Item (FSI) Index Selection Report		DI- SESS -80983
MPA-001	Planned Maintenance System (PMS) Logic Tree Analysis with Supporting Rationale and Justification		DI- SESS -80984
MPA-001	Planned Maintenance System (PMS) Servicing and Lubrication Analysis		DI- SESS -80985
MPA-001	Planned Maintenance System (PMS) Requirement Index		DI- SESS -80986
MPA-001	Planned Maintenance System (PMS) Procedure Evaluation Sheet (PES)		DI- SESS -80987
MPA-001	Planned Maintenance System (PMS) Task Definition		DI- SESS -80988
MPA-001	Planned Maintenance System (PMS) Inactive		DI- SESS -80989

CDRL #	Title	Sub-Title	DID No.
	Equipment Maintenance (IEM) Requirement Analysis		
MPA-001	Planned Maintenance System (PMS) Reliability Centered Maintenance (RCM) Documentation Control Sheet		DI- SESS -80990
MPA-001	Planned Maintenance System (PMS) Maintenance Requirement Card (MRC)		DI- SESS -80991
MPA-001	Planned Maintenance System (PMS) Maintenance Index Page (MIP)		DI- SESS -80992
MPA-001	Planned Maintenance System (PMS) Quality Assurance Check Sheet		DI- SESS -80993
MPA-001	Planned Maintenance System (PMS) Functional Block Diagram		DI- SESS -80994
MPA-002	Level of Repair Analysis (LORA) Report	Level of Repair Analysis	DI-ILSS-80655
MPA-003	Maintenance Requirements List		DI-MISC-80508A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-MPA-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Reliability Centered Maintenance
3. Subtitle (If Applicable).	
4. Authority.	DI-SESS-80979; DI-SESS-80980; DI-SESS-80981; DI-SESS-80982; DI-SESS-80983; DI-SESS-80984; DI-SESS-80985; DI-SESS-80986; DI-SESS-80987; DI-SESS-80988; DI-SESS-80989; DI-SESS-80990; DI-SESS-80991; DI-SESS-80992; DI-SESS-80993; DI-SESS-80994
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC, APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

The delivery stages for developments using the requirements investigation process for RCM maintenance methodology is specified below and MIL-P-24534A. All references to MRC shall be changed to MPC.

Deliverable Packages.

Phase 1 - Master Systems and Sub-Systems Index forms, related Functional Block Diagrams

(DI-SESS-80979, DI-SESS-80994).

Government Review Point One

Phase 2 - Functional Failure Analysis Form (DI-SESS-80981).

Phase 3 - Additional FSI Selection and FSI Index (DI-SESS-80983).

Phase 4 - FMEA Forms (DI-SESS-80982).

Government Review Point Two

Phase 5 - Logic Tree Analysis Forms and backup rationale sheets (DI-SESS-80984).

Phase 6 - Servicing and lubrication Analysis forms (DI-SESS-80985).

Phase 7 - Maintenance Requirement Index forms (DI-SESS-80986).

Government Review Point Three

Phase 8 - Procedure Evaluation sheet form (DI-SESS-80987).

Phase 9 - Task Definition Forms (DI-SESS-80988).

Phase 10 - Inactive Equipment Maintenance (IEM) Analysis forms and Procedure Evaluation form (DI-SESS-80989).

Phase 11 - Unscheduled Maintenance documentation.

Phase 12 - MIP and MPC documentation and the Documentation Package, including the RCM Documentation Control Sheet, and the completed QA Checklist (DI-SESS-80990, DI-SESS-80991, DI-SESS-80992, DI-SESS-80993).

Government Review Point Four and Final Acceptance

BLK04. The following changes apply to DID DI-SESS-80991, PMS MRC
BLK10.1 Change to read. The Contractor shall utilize all Reliability and SUA information, Manufacturer Maintenance requirements, Manning Study, Technical Publication and Drawings for the development of MPC.

BLK10.2 Change to read. The Contractor shall record maintenance data IAW the Planned Maintenance System Development Process Guide, CGTO PG-85-00-230-S.

BLK10.3.6 Delete all references to Navy rates and use the U.S. Coast Guard enlisted qualifications manual.

BLK08. Government review and approval for technical content, completeness, format and clarity.

BLK12. Analysis documentation delivered shall initially document the pre-product configuration baseline. Subsequent update analysis shall be performed and document configuration changes incorporated into the approved product configuration baseline. Subsequent product configuration baseline documentation delivery is required within 30 days of Government approval of the product configuration baseline. Allow 90 days for Government review.

BLK13. Completion NLT 6 MPTD (30 days for Government review)

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-MPA-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Level of Repair Analysis (LORA) Report
3. Subtitle (If Applicable).	Level of Repair Analysis
4. Authority.	DI-ILSS-80655 or equivalent
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	30 DPCDR
13. Date of Subsequent Submission.	See BLK 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK 08. Government review and approval for content, management approach, and completeness. Allow 30 days for Government review.
BLK 13. Final Submission NLT 120 DACDR

Attachments. USCG LORA Process Guide

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-MPA-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Maintenance Requirements List
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW paragraph X.X.X.X
6. Requiring Office.	APO
7. DD 250 (Material Inspection & Receiving Report) Required.	LT
8. Approval Code.	A
9. Distribution Statement Required.	
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See BLK 16
13. Date of Subsequent Submission.	30 DARC, See BLK 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 0

16. Remarks and Tailoring for Specific Contracts.

BLK 12. Submission shall be concurrent with submission of CDRL-MPA-001. Allow 30 days for Government review.
BLK 13. Completion NLT 6 MPTD (30 days for Government review)

Attachments. MRL Data Field Descriptions

MRL Data Field Descriptions for CDRL MP-003	
MRL Data Element	Comments
Nomenclature	(If Required) Nomenclature for the CEINUM.
Location	Port, Stbd, 1, 2, 3, Fwd, Aft, CL, etc.
MPC Number	A unique code for the asset type.
Action Verb	A valid ACMS action verb.
MPC Task Description	A task description used in the procedure body.
Scheduling Unit	Either M" (Monthly)
Scheduling Interval	The maintenance interval: either the number of months (may be less than one), or the number of hours (may not be less than one), or blank if the task is unscheduled.
Rates	BM, DC, EM, ET, FN, MK, or SN. More than one rate may be selected.
Rate Time	The estimated time to accomplish the maintenance for each rate. Time estimates will be in hours and may be less than one, include preparations and set-up, but not travel.

Supply Support (General Description)

The Supply Support section specifies the requirements to ensure that the Contractor provides effective supply support upon acceptance of the System. The CDRLs are essential to provisioning and supply support and are presented as recommended language and requirements for structuring the logistics portion of a solicitation. These CDRLs will be used in writing supportability SOWs for future acquisition programs. It is impractical to expect that this handbook will address every eventuality that could be encountered in preparing a statement of work. Nevertheless, it will serve as a point of departure for establishing and tailoring requirements for each acquisition, whether a new System, a major modification or upgrade to an item.

SUPPLY SUPPORT (SUS)

A. General Overview

1. Purpose. This section specifies the requirements to ensure the Contractor provides effective SUS upon acceptance of the System.
2. Scope. SUS for the project will cover all Systems being acquired.

B. Background

1. The USCG defines SUS as all management actions, procedures, and techniques required to determine requirements for acquiring, cataloging, receiving, storing, transferring, issuing, and disposing of secondary items. This includes provisioning for initial support as well as replenishment SUS.
2. The USCG conducts SUS for its Systems using two major sources of support. The most immediate source of support consists of the locally held repair parts delivered with the System. The primary source of support consists of a formally designated, centralized USCG ICP. The Government reserves the right to purchase spare and repair parts from the Contractor using Interim Contractor SUS.
3. Provisioning is the process of determining and acquiring the range and quantity (depth) of support items (for example, spares and repair parts plus support and test equipment) required to operate and maintain an end item of material for an initial period of service.
4. Outfitting is the process of placing onboard all the material specified by the authorized allowance documents. It includes ordering, funding, expediting, follow-up, receipt, inspection, and stowage of material. Outfitting commences early in the construction period, continues during designated fitting out availability and does not end until the completion of allowance requirements definition and the receipt by the SYSTEM of all initial allowance material.

C. Definitions & Terms

1. Activity Control Number (ACN). A number assigned by the Government to identify items of supply not currently assigned a NSN.
2. Advance Repairable Identification Code (RIC). An Advance RIC is a document/record consisting of an alpha-numeric designator and the item nomenclature, and serves as a place holder in the Weapon Systems File until provisioning has been completed. Advance RIC assignment usually begins XX months prior to delivery/installation of the end item. The Advance RIC will become part of an APL having the same alpha-numeric designator RIC after provisioning has been completed. A PAL may be an intermediate step, which also will be identified by the same alpha-numeric designator RIC.
3. Allowance. Allowance is the Government authorization for carrying an item for a SYSTEM in a designated quantity.
4. Allowance Equipage List (AEL). A list developed for specific categories of allowance items of a durable nature, not installed, that must be carried on an SYSTEM to perform its mission. The USCG defines equipage as specific categories of allowance items of a

durable nature, which must be carried on the SYSTEM to perform its mission. This includes non-installed equipage, tools, special and common support, and test equipment.

5. Allowance Parts List. The APL is a technical and supply document comprised of characteristics, repair parts, sub-assemblies, special tools and accessory components for individual hull, mechanical, electrical, electronics, and ordnance and equipment or components. It lists logistics and support information and the applicable maintenance significant repair parts for the System/equipment.
6. Binning. Binning is the operation by which authorized allowance material is placed into designated stowage devices or stowage device replicas representing a storeroom configuration in the Contractor's warehouse receiving and holding area prior to loading.
7. Certificate of Identicality. A certificate signed by the Contractor attesting that materials and/or equipment used on follow on Systems are identical in every respect to the item previously provisioned and approved on an earlier SYSTEM.
8. Commercial and Government Entity (CAGE) Code. A five digit numerical code assigned to manufacturers.
9. Common and Bulk Items List (CBIL). This data consists of those items that are difficult or impractical to include in the top down/disassembly sequence PPL, but for which provisioning is essential to support the operation of the end item/equipment. These items are subject to wear or failure, or otherwise required for maintenance, including planned maintenance, of the end item/equipment.
10. Component. An assembly or any combination of parts, subassemblies and assemblies mounted together normally capable of independent operation in a variety of situations.
11. Component Identification Data. This data describes the equipment or System being provisioned, the purchase data, Statements of Prior Submission (SPS) data for GFE/GFM and CFE/CFM, and Data Certification information. CID is used to deliver Provisioning Header Data, SPS, and the data required to request an Advance RIC.
12. Contractor Furnished Material. CFM is an item furnished by the Contractor under the requirements of the contract for installation into the SYSTEM or for turnover to the government for other use or disposition. It includes, but is not limited to equipment, components, assemblies, parts, tools, supplies and materials.
13. Data Product Deliverables (DPD). The individual data items listed on the LMI worksheet. DPD refers to various types of provisioning data categories including:
    a. Provisioning Parts List (PPL)
    b. Long Lead Time Items List (LLTIL)
    c. Repairable Items List (RIL)
    d. Interim Support Items List (ISIL)
    e. Tools and Test Equipment List (TTEL)
    f. Common and Bulk Items List (CBIL)
    g. Design Change Notices (DCN)

h. Post Conference List (PCL)

i. System Configuration Provisioning List (SCPL)

j. SYSTEM Level Provisioning Parts List (LPPL)

k. Component Identification Data (CID)

14. Days. Days means calendar days, including Saturdays, Sundays, or holidays.

15. Defense Logistics Information Service (DLIS). The Department of Defense (DoD) activity responsible for the maintenance of all cataloging data for items registered in the DoD supply System. (Note - DLIS assigns all NSNs).

16. Design Change Notice. A formal document prepared by a Contractor or a Government activity to notify the Logistics Centers of changes to previously delivered provisioning lists, which add to, delete, supersede or modify items which are approved for incorporation into the end item.

17. End Article. A component, assembly, or subassembly being procured as the principal item on the contract.

18. End item. A final combination of end products, component parts, or materials which is ready for its intended use; e.g., cutter, boat, mobile machine shop, aircraft, receiver, recorder, or support equipment.

19. Engineering Data for Provisioning (EDFP). Data acquired by contract to support LMI supportability analysis. This data is necessary for the assignment of SM&R codes to each PLISN on the provisioning list. EDFP is also used for assignment of Item Management Codes, prevention of proliferation of identical items in the Government inventory, maintenance decisions, and item identification necessary in the assignment of a NSN.

20. Facilities. The permanent or semi-permanent real property Systems required to support the material System, including conducting studies to define types of FAC or facility improvements, locations, space needs, environmental requirements, and equipment.

21. General Conference. A conference that may be held at any time during the life of the contract to resolve provisioning problems.

22. General Use Consumable List (GUCL). A list of recommended non-equipment related consumables necessary to support a System's routine and administrative operations.

23. Government Furnished Material (GFM). GFM is material provided by the Government to a Contractor or comparable Government production facility for use with or in support of a product to be delivered to the Government or ordering activity, or which may be consumed or expended in the performance of the contract. It includes, but is not limited to equipment, components, assemblies, documentation, publications, parts, tools, supplies and materials.

24. Guidance Conference. A conference used to ensure that the Contractor and the Government have a firm understanding of the contractual provisioning requirements, establish funding and task MSs, and formulate firm commitments for optional requirements IAW applicable data requirements.

25. Installation and Check-Out (INCO) Spares. Spares used to verify that installation is complete, correct and to support the test of installed equipment prior to operational use.
26. Insurance Spares. Spares, repair parts, or units procured for items that normally have a low demand rate, but would be difficult to replace because of procurement lead-time or manufacturing complexity. Insurance spares are bought for those items whose loss renders the System inoperable for a long period because the low demand rate does not generate procurement for System stock. These items support mission critical equipment/Systems and an unexpected failure would cause severe degradation or completely abort the primary mission.
27. Interactive Computer Aided Provisioning System (ICAPS). ICAPS is a software package designed to automate the Contractor development and submission of PTD, the Logistics Centers review and acceptance of PTD, and ICP review and receipt of PTD. ICAPS is comprised of two software packages: a PC Windows version and a Client Server version. The software provides data entry screens for data input, various capabilities/utilities to manipulate the data, and the ability to input/output the data in correct LMI required format**.**
28. Interchangeability Code. A code that indicates the relationship of items and is normally used with DCNs. It represents the relationship of an existing item being replaced by a new item. Examples include one-way (OW), two-way (TW), not-existing item (NI) and not-new item (NR).
29. Interim Release. Authorization given a Contractor to release support items to production or procurement prior to receipt of a provisioned item order (PIO).
30. Interim Supply Support Conference (ISSC). A conference for the Government to review, select and approve those items recommended for interim support (i.e., Contractor supply/logistics support) by the Contractor as cost effective for advance procurement prior to the time provisioning for operational requirements has been accomplished and a PIO has been provided.
31. Interim Support Items List. This data consists of those support items required between operational need date and the point in time that provisioning for operational requirements has been accomplished.
32. Long Lead Time Items. Those items which because of their complexity of design, complicated manufacturing process, or limited production capacity cause extended production or procurement cycle which would preclude delivery in time to meet operational need date if not ordered in advance of normal provisioning.
33. Long Lead Time Items List. This data consists of those items which, because of their complexity of design, complicated manufacturing process or limited production capacity, may cause production or procurement cycles which would preclude timely and adequate delivery, if not ordered in advance of normal provisioning.
34. Long Lead Time Items Provisioning Conference. A conference for the Government personnel to review and select the long lead time items required for support of the end item. Interim Release Items may be reviewed during this conference.
35. Loose Hardware. Loose hardware is portable or semi-portable CF/GF operating space items required by shipbuilding, conversion, or modernization contract, specification,

drawing or other authoritative source document which cannot be classified as belonging to and thus incorporated into AEL of the general AEL material categories. Loose Hardware is an exception classification and will be assigned to categorized material only after it had been determined that no proper AEL classification is available or that is excluded from AEL incorporation.

36. Maintenance Levels. The basic levels of maintenance into which all maintenance activity is divided. The USCG uses two levels of maintenance, organizational and depot. The scope of maintenance performed within each level must be commensurate with the personnel, equipment, technical data, and FAC provided.

37. Master Equipment Configuration List. A technical and supply document prepared for an individual System which lists the equipment and components installed, associated on board repair parts, special tools, test equipment, miscellaneous portable items, and equipage required to perform its mission.

38. Mission Criticality Code (MCC). As described below in Table E-1 the USCG MCC is a subjective indication of the "importance" of the equipment or component to the missions and operations of the unit. It indicates the level of mission and operations degradation the unit might experience in the event the equipment or component should fail.

Coast Guard Mission Criticality Codes

CODE	DEFINITION
4	Severe degradation of mobility, total loss of primary mission, or loss of this equipment results in a safety hazard to the ship or its crew.
3	Severe degradation of a primary mission.
2	Total loss of secondary mission, partial loss of primary mission.
1	Partial loss of secondary mission.

Table E-1

39. Mockup. Mock ups are full-scale stowage models or replicas representing the SYSTEM stowage devices or spaces. Mockups represent SYSTEM stowage and storeroom configuration in capacity only and need not be an exact replica. (cutter only)

40. Operating Material and Spares (OM&S). Spare and repair parts held locally for maintenance and repair of equipments and components.

41. Operating Space Item (OSI). OSI is any items that should be carried in or near the operating space in which it is most frequently used or is likely to be used for safety reasons or convenience of the crew, while performing the System’s mission. OSI may consist of equipage, repair parts, spares, loose hardware, consumables, accessories, tools, and support and test equipment. Positioning of OSI material is determined by several considerations including the nature of the item such as weight, size, number of

departments requiring use of the item, criticality, and anticipated frequency of use in each department and special stowage requirements. In certain cases, SRI may become OSI due to the size or weight of the item. These are referred to as "bulkhead mounted spares". (cutter only)

42. Part Number. A PN is a unique identifier of a part used in a particular industry and assigned by a vendor. Another name for reference number.

43. Post Conference List (PCL). This data consists of those items selected for the operations, maintenance and support of the System/end article because of the Provisioning Conference review.

44. Prebinning. The operation of placing authorized allowance material in designated stowage devices/replicas (mock-up), representing onboard storeroom configurations, in the Contractor's warehouses. (cutter only)

45. Preliminary Allowance List (PAL). A PAL is a document/record consisting of preliminary provisioning information, and is published in APL format when provisioning has not been completed prior to delivery/installation of the end item. PAL assignment usually begins six months prior to delivery and continues until two months prior to delivery of the end item. The PAL will become an APL having the same alphanumeric designator RIC after provisioning has been completed.

46. Provisioned Item Order. A formal requirements document furnished to the contract administration activity to identify items to be bought through the provisioning process on a contract, providing the specific items to be ordered, the estimated cost, and the required delivery schedule and destination. The PIO is provided with other formal contract documentation to the Contractor to place items on order. The PIO is an unpriced order.

47. Provisioning Conference. A conference for reviewing PTD/EDFP, and for Government validation of support items and the assignment of technical and management codes assigned by the ICP.

48. Provisioning Methods. Method by which the ICP will make provisioning decisions. The method will be specified in the provisioning requirements. The following provisioning methods are applicable:

    a. Resident Provisioning Team (RPT) Method. This method employs a Government team permanently assigned at the Contractor’s facility skilled in the functions of provisioning control, source, maintenance, and recoverability coding, requirements determination, cataloging, etc.

    b. Conference Team Method. This method employs Government representatives at the Contractor’s or vendor’s facility. The conference team is not permanently assigned to the Contractor’s facility.

    c. In House Method. The Government conducts provisioning at the ICP or other location specified by the prime ICP. Contractor participation will be specified by the ICP.

49. Provisioning Parts List. This list structured at the end item, component, or assembly level contains the end item, component, or assembly equipment and all support items

which can be disassembled, reassembled, or replaced, and which, when combined, constitute the end item, component, or assembly equipment.

50. Provisioning Parts List Index (PPLI). The PPLI is a listing by manufacturer's reference numbers of all items listed in the PPL cross-referenced to each item's PLISN.

51. Provisioning Performance Schedule (PPS). Checklist of events including schedules in the provisioning process that is used to monitor such events.

52. Provisioning Preparedness Review Conference. This conference is held for the Government to determine the adequacy of the provisioning documentation, FAC, and the overall preparations made by the Contractor to conduct a provisioning conference.

53. Provisioning Technical Documentation. PTD is the generic term used to reference the various types of provisioning data. This term is used for the identification, selection, and determination of initial requirements and cataloging of support items to be procured through the provisioning process. Applicable PTD consists of EDFP, CID, and various DPDs.

54. Reference Designators. A method used for uniquely identifying and locating discrete items/parts on diagrams and in a set; for correlating items in a set, graphic symbols on diagrams, items on a PL circuit description and instructions. The three methods used for applying reference designations are Unit Numbering, Location Numbering and Location Coding methods.

55. Reference Number. Any number, other than a Government activity stock number, used to identify an item of production or, used either by itself or in conjunction with other reference numbers, to identify an item of supply. Reference numbers include manufacturer's part, drawing, model, type, source controlling numbers, and the manufacturer's trade name; specification or standard numbers; and specification or standard part, drawing, or type numbers.

56. Repair Parts. Repair parts are those parts that are used to repair a higher indenture level item/assembly. A repair part may also be a repairable item and require lower level of indenture repair parts. Repair parts may be applicable to either organizational or depot level maintenance, or both, depending on the level of repair.

57. Repairable Identification Code. An alpha-numeric designator assigned to a repairable item identifying it to items of a lower level (piece parts). It is used as an APL or an AEL number.

58. Repairable Items List. This data consists of all support items of a repairable nature and used in or associated with the end item.

59. Replacement Factor (RF). The RF represents the best estimate of the replacement rate for an item per application per year. When a RF is provided to the Contractor by the Government, that factor shall be used for preparing PTD.

60. Source, Maintenance and Recoverability Code. A SM&R code is a five position alphanumeric code. These codes identify the source of spares and the levels of maintenance authorized to maintain, repair, overhaul, or dispose of all equipment. This information helps maintenance and supply personnel identify parts. In an SM&R code, the first position indicates the source from which you can acquire the item for

replacement. The second position in the SM&R code identifies either the restrictions on acquiring the I tem or the level of maintenance required to manufacture or assemble the item. The third and fourth positions of the SM&R code identify maintenance-level codes. The third position indicates the lowest maintenance level authorized to remove, replace, and use the item. The fourth position indicates the lowest maintenance level authorized to perform complete repair of the item. The fifth position in the SM&R code indicates the recoverability code. This code tells maintenance and supply personnel the lowest level of maintenance authorized to condemn the item, if necessary. SM&R Codes shall be developed and documented as part of the LORA.

61. Storeroom Items. SRI includes allowed repair parts, subassemblies, and units in support of equipment, backup quantities of consumable supplies not related to specific equipment, and backup quantities of forms. However, for purposes of MIL-STD-1339C, storeroom items are limited to repair parts, subassemblies, and units of issue in support of hull, mechanical, electrical, ordnance, electronic material, and any other items which may be specifically designated by the CG.

62. Supplementary Provisioning Technical Documentation. See EDFP.

63. Support Concept. A complete System level description of a SUS, consisting of an integrated set of ILS element concepts, which meets the functional support requirements and is in harmony with the design and operational concepts.

64. Support Equipment. All equipment (mobile or fixed) required to support the operation and maintenance of a material System. This includes associated multi-user end items, ground handling and maintenance equipment, tools, metrology and calibration equipment, communications resources, test equipment and automatic test equipment, with diagnostic software for both on and off equipment maintenance. It includes the acquisition of logistics support for the support and test equipment itself.

65. Support Items. Items subordinate to, or associated with, an end item (i.e., spares, repair parts, tools, test equipment, and sundry materials) and required to operate, service, repair, or overhaul an end item.

66. Support Plan. A detailed description of a support System covering each element of ILS and having consistency between the elements of ILS. Support plans cover lower hardware indenture levels and provide a more detailed coverage of maintenance level functions than support concepts.

67. System Configuration Provisioning List. This data establishes the family tree relationship of components to end item when associated PLs are developed at a component level. It also includes components which will be GF and separately provisioned.

68. Technical Data. Recorded information regardless of form or character (e.g., manuals, drawings) of a scientific or technical nature. Computer programs and related software are not technical data; documentation of computer programs and related software are. Also excluded are financial data or other information related to contract administration.

69. Technical Replacement Factor. This represents the replacement rate for an item based on the number of expected failures that require removal and replacement of the support item

at the organizational maintenance level in a next higher assembly per equipment/end item per year.

70. Tools and Test Equipment. Those support items that are not an integral part of the end item but are required to inspect, test, calibrate, service, repair, or overhaul an end item. Tools and test equipment are a subset of SUE.

71. Tools and Test Equipment List. The list consisting of SUE required to inspect, test, calibrate, service, repair, or overhaul an end item.

72. Top down. Top down is a sequencing of all parts comprising the end item in a lateral and descending "family tree/generation breakdown." This breakdown consists of the end item including all components, listing every assembly, subassembly and part that can be disassembled, reassembled, or replaced. All parts are listed in their relation to the end item, component, assembly, or installation System in which they are contained and to their own further sub/subassemblies and parts. This relationship is shown by means of the indenture code. The indenture code indicates that the item is associated with, contained in, or part of, the preceding item identified with an indenture code of the preceding alpha character.

73. Vendor Item. An item which is used in or attached to the end item produced by the Contractor and which is procured by the Contractor on the open market or from established sources and for which the Contractor is not the design activity.

D. <u>References</u>

1. Systems Integrated Logistics Support (SILS) Policy Manual, COMDTINST M4105.8 (series)
2. Major Systems Acquisition Manual (MSAM), COMDTINST M4150.2 (series)
3. Supply Policy and Procedures Manual (SPPM), COMDTINST M4400.19 (series)
4. Fitting Out Procedures – Ships, MIL-STD-1339C
5. Logistics Management Information (LMI) Performance Specification, MIL-PRF-49506 of 11 Nov 96
6. Federal Acquisition Regulations Government Property, FAR 45
7. DOD Provisioning and Other Re-procurement Screening Manual, DoD-STD 4100.38 of 1 Nov 83
8. Technical Data Packages (TDPs), MIL-DTL-31000
9. Marking for Shipment and Storage, MIL- STD-129
10. Operation of the Defense Acquisition System, DoDI 5000.2

E. <u>Roles & Responsibilities</u>

1. Provisioning Program. The Contractor shall establish, implement, and maintain a Provisioning Program IAW this SOW. As part of the Provisioning Program, the Contractor shall plan and implement SYSTEM provisioning, including responsibilities, schedules, and interfaces with existing Systems and practices. The Contractor shall implement the provisioning efforts for all repairable and replaceable equipment to

support Organizational, and Depot Level maintenance requirements IAW the RAM and RCM analyses developed for the SYSTEM. The Contractor shall establish necessary procedures to assure that provisioning data is collected, tracked, and integrated into the provisioning data files described in CDRL-SUS-004.

2. Conferences. The Contractor shall provide FAC for provisioning conferences as required unless the Government chooses to hold the conference at a Government facility. The conferences will be held IAW CDRL SUS-001.

3. The Contractor shall develop and deliver the agenda and minutes for all provisioning related conferences IAW CDRL SUS-002. The following types of provisioning conferences are possible.

   a. Provisioning Guidance Conference. The USCG holds a PGC to ensure mutual understanding of provisioning requirements and responsibilities. It should solidify the provisioning team's understanding of the provisioning System being used to develop and submit PTD. Contractor personnel who will prepare the provisioning documentation are required to attend. The attendees of the PGC should thoroughly review the contract requirements and be ready to present any questions and recommendations relative to the provisioning requirements. The Contractor will prepare a System block diagram/family tree (refer to the SCPL required in CDRL SUS-009) to facilitate the determination of the level to which PTD submission will be required.

   b. Long Lead Time Provisioning Conference (LLTIPC). PGC attendees will address the requirements and criteria for the LLTIPC. The purpose of the LLTIPC is to identify those items with a production/acquisition period warranting early acquisition. The output of the LLTIPC will be the LLTIL that the contractor shall develop with the conference attendees IAW CDRL SUS-003.

   c. Interim Support Item Provisioning Conference (ISIPC). Requirements and criteria for the ISIPC will be addressed during the PGC.

4. Provisioning PTD Submittal. As part of the provisioning program, the Contractor shall develop and submit PTD for Government approval IAW this SOW. PTD submittal shall include CID, Data Product Deliverables, and EDFP. The PPL shall be developed IAW CDRL SUS-004 and the following:

   a. PTD Sequencing. Individual PLISNs shall be sequenced by one of the following methods.

   b. Electronic Systems and Equipment. PTD for electronic Systems and equipment shall be sequenced by reference designation.

   c. Non-electronic Systems and Equipment. PTD for non-electronic Systems and equipment shall be sequenced by indenture code.

   d. Non-electronic Systems and Equipment having Electronic Components that are designed with Reference Designations. Any non-electronic Systems or equipment containing electronic components shall be sequenced by indenture code; however, the PTD for the electronic components in these Systems or equipment shall be sequenced by reference designation.

e. Reference Designators. For end items requiring a top-down breakdown by means of reference designation, the Contractor shall assign reference designators.

f. Indenture Codes. The Contractor shall assign indenture codes for all non-reference designator provisioning packages.

5. PTD Development and Delivery. Delivery of PTD shall either be via the Government's Interactive Computer Aided Provisioning System (ICAPS) or in a format and media compatible with ICAPS. ICAPS was developed by the Government for the purpose of developing and transmitting provisioning related data and is available free of charge to Contractor personnel as well as government agencies. ICAPS, with supporting documentation, is currently available for downloading from the ICAPS home page at http://icaps.navsea.navy.mil. ICAPS Personal Computer – Windows (ICAPS PC-WIN), which allows for remote provisioning development and the ability to produce the required, formatted outputs.

6. Component Identification Data (CID). The CDRLs and LMI Worksheet specify the data, format and media requirements for CID. The Contractor shall use CID to submit identification data for all Systems and equipment. CID shall be delivered concurrently with every submittal of Data Product Deliverable. The Contractor shall use CID for submittal of Provisioning Header Data, COI, and Advance RIC requests.

7. Provisioning Header Data CID. The Contractor shall submit header data with each provisioning project. For Provisioning Header Data, the Contractor shall submit the provisioning data products specified in the LMI Worksheet for each Procurement Contract Control Number (PCCN). The data shall provide the CG sufficient end item information to identify the System or equipment, the applicable contract, and the planned installations.

8. Certificate of Identicality (COI). To satisfy the data and delivery requirements of COI for GFE and CFE, the Contractor shall submit the provisioning data products specified in the LMI Worksheet. The Contractor shall deliver a COI by providing a CID in accordance CDRL SUS-005.

   The COI shall apply to the end item, or to any component thereof, and it shall provide total identification of the System, equipment or component. By submitting a COI, the Contractor certifies all of the following:

   a. PTD, which may satisfy the requirements of the contract, has previously been furnished to the Government for the System, equipment or component being procured. (When a COI is submitted without an APL identified, the submitter shall identify the PCCN, the submittal date and the government agency to which the PTD was previously submitted.)

   b. The required maintenance philosophy is fully supported.

   c. All replacement parts are 100% identical to those provided by the previously furnished PTD.

   If there are maintenance philosophy/part differences, a COI with Differences shall be submitted as a DCN with supporting EDFP that identifies the differences. The COI with Differences shall identify the changed PNs from before the change as deletions and the

new PNs as additions. The government shall reject a COI if it does not meet both the data and certification requirements of this contract. If a COI is rejected, the Contractor shall be required to submit a new provisioning package that meets the PTD requirements.

9. Advance RIC CID. The Contractor shall use CID to submit the data required to request an Advance RIC for any System or equipment that will not have PPL or a PAL request submitted in time for configuration identification. The Contractor shall submit the provisioning data products specified in the LMI Worksheet. The Advance RIC shall be developed IAW CDRL SUS-006. Additionally, the following information shall be provided in the Characteristics Data field:

   a. Name of person requesting the Advance RIC.
   b. Command or Activity.
   c. Date Advance RIC was requested.
   d. Scheduled date for complete PTD to be provided to the designated ICP
   e. Applicable System/function, if known.
   f. The timeframe requiring an Advance RIC request shall be IAW the CDRL.

10. Engineering Data for Provisioning. EDFP is the technical data that provides definitive identification of dimensional, material, mechanical, electrical, or other characteristics adequate for provisioning of the support items of the end article(s) on contract. Approved EDFP is required for all Systems or equipment that is acquired for CG use and for which PTD is being acquired.

    EDFP shall not be provided when the item is identified in the DID System with a type item identification of 1, 1A (K), or 1B (L) or (3) the item is listed as a reference item (subsequent appearance of an item on a PL).

    EDFP consists of data such as specifications, standards, drawings, photographs, sketches and descriptions, and the necessary assembly and general arrangement drawings, schematics, drawings, schematic diagrams, wiring and cable diagrams, etc., or what is sometimes referred to as form, fit and function. This data is necessary for the assignment of SM&R codes, for assignment of Item Management Codes, prevention of proliferation of identical items in the Government inventory, maintenance decisions, and item identification necessary in the assignment of a NSN.

    EDFP format and content must be prepared IAW the latest industry standards and must be reproducible, as outlined below.

    Approved EDFP shall contain all appropriate annotations, i.e., proper Distribution Statements, Military Critical Technology markings, etc. The EDFP shall be developed IAW CDRL SUS-007.

    For items without a NSN, recognized industry standard or government specification or standard, the following order of precedence is required for EDFP:

    a. Technical Data equivalent to approved Product Engineering Drawings as defined in MIL-DTL-31000.
    b. Commercial drawings.
    c. Commercial manuals, catalogs or catalog descriptions.

d. Sketches or photographs with a brief description of dimensional, material, mechanical, electrical or other characteristics.

11. EDFP shall provide for the following:

a. Technical identification of items of maintenance support considerations.

b. Preparation of item identification for the purpose of assigning NSN.

c. Review for item entry control.

d. Standardization.

e. Review for potential interchangeability and substitutability.

f. Item management coding.

g. Preparation of allowance/issue lists.

h. Source, Maintenance, and Recoverability coding.

12. EDFP shall not be provided when the item is:

a. Identified by a government specification or standard which completely describes the item including its material, dimensional, mechanical and electrical characteristics.

b. Identified in Defense Logistics Information as having an NSN with salient characteristics identical to the item.

c. Item is listed as a reference item (subsequent appearance of an item) on a PL. EDFP is used to accomplish the provisioning process and is required to perform provisioning when MIL-DTL-31000 is not on contract. It is important to emphasize that policy is to use the existing Technical Data Package (TDP) MIL-DTL-31000 contract requirements, *if part of the contract,* to support the provisioning process. Generally, this can be done by acquiring copies of products being developed for the MIL-DTL-31000 DIDs (DI-DRPR-81000 or DI-DRPR-81003) at the time of the provisioning events for cost of reproduction and delivery without regard to completeness of the drawing. EDFP shall be provided from the TDP CDRLs for DIDs DI-DRPR-81000 or DI-DRPR-81003 tailored to support the provisioning process and delivered concurrent with PTD. However, if CDRLs for these two DIDs are *not* part of the contract, the Contractor shall provide the EDFP IAW CDRL(s) for DID DI-ALSS-81530.

13. Provisioning Item Order. If the Government elects to procure support items from the Contractor, the Government will release an initial basic PIO for the required support items. If concurrent delivery is required and such delivery necessitates a delay in the delivery of the end items or components, an adjustment in the delivery requirements will be considered. The Government reserves the right to place additional orders for support items during the life of the contract.

a. SYSTEM Level Provisioning Part List (SLPPL). The Contractor shall prepare a PPL to the system level. A SLPPL shall contain miscellaneous parts and items that are not included in individual equipment or component (unit) provisioning data or CBIL. SLPPL items are not associated with a specific parent System or equipment; however,

they can be related to an overall System. The Contractor shall segregate all item parts of SLPPL by their application to basic system functions as identified by "*The International Specification for Technical Publications Utilizing a Common Source Data Base – S1000D*™".

At a minimum, the Contractor shall prepare a separate SLPPL for each S1000D function identified. The Contractor shall list an item having multiple applications in each SLPPL for each S1000D code in which it is used. The requirement for a SLPPL applies to cutter contracts only. The Contractor shall develop the SLPPL IAW CDRL SUS-004.

b. System Configuration Provisioning List (SCPL). The Contractor shall develop and provide a SCPL, which establishes a "family tree" relationship of components to the end item (System). This is required for GF end items (Systems) only. The GF SCPL will detail each separate appearance of the component level items that comprise the end item (System) and will list all attaching parts used to integrate the component level items into the end item (System). These attaching parts should not be included in the individual component level item PPL. The Contractor shall develop the System SCPL IAW CDRL SUS-009.

c. Design Change Notice (DCN). The Contractor shall notify the KO through a DCN of all changes, whether of a production or modification type, which are approved for incorporation into the end item and which modify, add to, delete, or supersede parts in the end item or its supporting equipment. The Contractor shall submit a DCN IAW CDRL SUS-010.

d. When the design change significantly affects the System or equipment configuration, and when directed by the KO, the Contractor shall provision the changed System or equipment as a new end item and documented by PTD with associated EDFP.

When, in the opinion of the Contractor, a deviation from standards, previous instructions from the technical representative, or requirements of this SOW is in order, the Contractor shall make a request for deviation in writing to the KO with an information copy to the technical representative. The KO shall notify the Contractor in writing of approval or disapproval, of the deviation, within 60 days after receipt.

When an approved engineering design or production change requires new identification, the Contractor shall submit PTD revisions via DCNs IAW the following:

(1) When the approved change affects interchangeable repairable assemblies which introduces non-interchangeable parts, identify the PN before the change as a deletion and the PN after the change as an addition.

(2) Change and document the PN of the next higher assembly, and those of all progressively higher assemblies, up to the assembly where interchangeability is reestablished. PTD shall include the interchangeable assembly.

(3) EDFP is not required for deleted items.

(4) The Contractor shall document changes that occur after the Contractor has delivered the PTD as a revision to the applicable PTD.

14. Interim Supply Support (ISS) Provisioning Requirements. If the Government exercises the ISS option, the Contractor shall develop and provide an ISILs. The ISIL provides a parts breakdown of the System or equipment using mandatory DPDs for each part. The specific DPDs required to determine ISS requirements are identified in the LMI Worksheet.

    The Contractor shall utilize the same data development and submission methodology for ISS as required for the remainder of the provisioning related data. The Contractor shall submit the ISIL IAW CDRL SUS-011.

15. Contractor Outfitting Operations. The Contractor shall perform System management and material processing consisting of the receipt, inspection, and identification of government-furnished outfitting material received at the Contractor's premises prior to delivery of the cutter to the Government. In the case of cutters being converted or modernized, material processing includes the offloading and processing of offloaded material inventories.

    Baseline System Files. In the performance of System management, the Contractor shall establish and maintain, as a minimum, the following automated files:

    Baseline System File – SRI
    Baseline System File – OSI

    These files may be integrated at the Contractor's option, so long as the capability to separately identify the categories of items is maintained. The Baseline Files shall be developed and submitted IAW CDRL SUS-012.

16. Outfitting Operations Plan (cutters only). The Contractor shall established outfitting procedures to be used in accomplishing the detailed requirements contained herein and described them in an outfitting operations plan. The Contractor shall provide outfitting documentation and support in the Outfitting Operations Plan IAW CDRL SUS-013. The Outfitting Operations Plan shall cover all onboard material. The onboard materials shall be loaded IAW MIL-STD-1339C.

17. Tool and Test Equipment List. The Contractor shall list recommended special tools and test equipment, OM&S, System stock, and insurance spares in a logistics database on vendor recommendations and the results of the SUA IAW CDRL SUS-008.

18. OM&S Ordering Process. The Contractor shall provide a set of OM&S for all CFM for each SYSTEM, support and test equipment (S&TE) and initial System stock for CG unique items through a Government established firm fixed price or PIO.

    The general parts ordering process is described below:

    OM&S shall be recommended for necessary maintenance of the component/equipment for a 60 day period.

    The Government will review and select OM&S, S&TE, and CG unique System stock. The Government will assign a NSN or ACN for each OM&S, S&TE and System stock item. The Government will then return incremental parts/equipment listings to the Contractor as authority to initiate procurement.

The Contractor shall procure support items within 60 days after receipt of the approved parts/equipment listing. Deviation from the 60 day requirement may be authorized for procurement of those items that would be affected by shelf life dates, tie-in with vendor production, batch procurement for cost leverage, and items requiring additional time for fact finding, audit and compliance with federal regulations.

The Government may provide the Contractor access to the Federal Supply System to procure items. The Contractor shall submit to the Government a listing of items with Source of Supply, NSNs, quantity and unit of issue (UI) to be purchased from Government Supply Sources. The Contractor's address, Point of Contact and phone number shall be included with the listing to the Government.

The Contractor shall submit requests for assignment of a Department of Defense Activity Address Code (DoDAAC) to the Government for use in purchasing by Military Standard Requisition and Issue Procedure (MILSTRIP) or by Defense Logistics Management System. The Government shall notify the Contractor of the DoDAAC, project order assignments and the Contractors limitations in ordering from Government Supply Sources. The Government is responsible for establishing the DoDAAC within the Federal Supply System and submitting supply support requests for the project to the source of supply. The Government shall monitor the Contractors purchasing from the Government Supply Sources authorized under this contract.

19. Material procurement. The procurement shall be scheduled to arrive in time to assure binning and loading of the system prior to inclining.

20. When a design change affects any item ordered, the Contractor shall take immediate action to implement the revisions and document the results on DCNs for approval IAW CDRL SUS-010. When a design change reduces or eliminates requirements, the Contractor shall adjust the requirement accordingly.

21. OSI/SRI and GUCL Listings. The Contractor shall develop and provide OSI/SRI and GUCL listings for government or CFE IAW CDRL SUS-014. The Contractor will base the OSI/SRI and GUCL listings on initial information provided by the Government. The Contractor shall provide the listings to the Government for review and approval. The Government may provide the Contractor access to the Federal Supply System to procure these items. The Contractor shall submit the OSI/SRI and GUCL listings using the same format as initially provided by the Government.

22. Receipt, Inspection, Identification, and Stowage. The Contractor shall perform the receiving, inspection, identification, handling, pre-binning, binning, loading, and stowage functions of all Government and CF SRI and OSI; Contractor furnished INCO Spares; material authorized allowance items; and any other material. The Contractor shall accomplish all functions IAW MIL-STD-1339C. The Contractor shall check all receipts against packing lists and his purchase orders to verify correctness and completeness. The Contractor shall take expeditious action to obtain missing material and replace damaged or unusable material. The Contractor shall report all replacements to the USCG.

23. Outfitting Material Status Reports. The Contractor shall submit Outfitting Material Status Reports IAW CDRL SUS-015. The reports shall allow the USCG to monitor and track all onboard allowance material IAW MIL-STD-1339C.

24. The Contractor shall load and properly stow, as directed by the USCG, all CF and GF SRI, OSI, and GUCL items. The Contractor will obtain a custody acceptance signature from the designated USCG representative upon loading out of each shipboard compartment and shore side storage cabinet.

25. The Contractor shall construct mock-ups of the ship's SRI storerooms IAW MIL-STD-1339C and assign permanent identifying numbers to the drawer, bin, and rack locations. The Contractor shall not use multiple stowage locations for identical material. In addition to the standard human-readable location number labels, the Contractor shall mark each location with the same location number using a bar code label prepared IAW MIL-STD-1189B or equivalent and USCG 2D Bar Code Standard Data Elements. Location bar code labels shall be "high density" and shall be of the "general use" type for the purpose of determining label height. The Contractor shall use indirect thermal printing (thermal transfer) labels which shall be affixed to the right of the human-readable labels, whenever practicable.

26. The Contractor shall accomplish pre-binning IAW MIL-STD-1339C. The Contractor shall not fill any drawer, bin, rack, or cabinet to over 80% of capacity without USCG approval. The Contractor shall secure the parts from coming adrift whatever the stowage method used. During pre-binning, the following criteria shall be applied:

    a. Small Item Stowage. The Contractor shall stow small items, such as, resistors, capacitors, and transistors which are packaged in envelopes standing-on-end in small version modular, high density storage equipment cabinets (e.g., VIDMAR cabinets) and compressed between drawer dividers.

    b. Stowage Device Selection. The Contractor shall base stowage device selection (drawer, bin, rack, or bulk stowage) on a balance between stowage space utilization and item accessibility. In selecting the appropriate type of stowage aid, the Contractor shall consider the stowage space requirements for the depth of stock of a line item (piece count for a line item) in addition to the size of the individually packaged line item.

    c. Drawer Size Selection and Compartmentation. The Contractor shall determine the size and number of drawers, drawer partition, and dividers required for small version modular drawer storage cabinets in storerooms during the pre-binning process. The Contractor shall select drawer sizes that offer the best stowage cube utilization for items to be stowed. The Contractor shall use drawer partitions and compartments for large items and those items having a large depth of stock. The Contractor may co-mingle smaller items, having a low depth of stock, in a single drawer compartment provided no more than ten line items are located within a single compartment.

    The Contractor shall determine the number of shelves for adjustable height shelving units for shelf cabinets located in storerooms during the pre-binning process. The criterion used for selecting the number of shelves required is to achieve a balance between stowage cube utilization and material accessibility in each stowage location. The Contractor shall achieve compartmentation by positioning shelving to restrict the number of line items per stowage location, and to maintain a reasonable degree of item accessibility and retrievability while maintaining good stowage cube utilization.

27. The Contractor shall prepare and provide a Binned Material List to enable the CG to verify inventory accuracy of all binned SRI IAW MIL-STD-1339C and CDRL SS-016.
28. The Contractor shall provide a Shipboard Stowage Locations List of all required onboard allowance material with the applicable designated stowage location IAW MIL-STD-1339C and CDRL SUS-017.
29. The Contractor shall turn over to the system, all allowance material received by the Contractor after System delivery and prior to departure from the Contractor's facility. The Contractor shall package and ship all Contractor's furnished onboard allowance material received after System departure, at Contractor's expense, IAW instructions provided by the USCG.
30. Shortage Reporting. The Contractor shall provide 100% of required material. When shortages exist, the Contractor shall follow-up and report the status to the Government on such shortages until the Contractor has delivered all items required by the contract. The Contractor shall prepare and submit concurrently with acceptance trials an Allowance Shortage List for review IAW CDRL SUS-018. A Departure Shortage List, at time of the system departure shall include shortages and all delivery status information available IAW CDRL SUS-019. The due-in document number/purchase order number will be provided for each shortage item listed until the material is received.
31. Excess Material. The Contractor shall provide an Excess System Outfitting Material Report IAW CDRL SUS-020 and MIL-STD-1339C. After review, the Government will provide disposition instructions.
32. The Contractor shall provide modular, high-density equipment storage cabinets for shoreside OM&S. The Contractor shall procure modular, high-density storage equipment cabinets, for storing shoreside repair parts, along with additional cabinets for future growth in government outfit items. The Contractor shall place labels on these cabinets to identify the cabinets on the craft where the same items are stowed. The cabinets shall be constructed so that they can be easily installed and removed without disassembly and without having to be unloaded, and so that their contents will be securely contained during transit. The cabinets shall be loaded/binned according to the requirements of this section.
33. Storeroom Items. The Contractor shall package such as to prevent damage caused by movement or the weight of parts in a box. The Contractor shall place a Packing List itemizing all parts in the box inside the lid of each box.
34. The Contractor shall preserve, package, pack, and mark Contractor furnished OM&S and unique System stock equipment and repair parts IAW ASTM D3951, except that the Contractor shall preserve sensitive electronic items IAW MIL-E-17555, Section 3.11.10. The Contractor shall package solid-state components, such as diodes, transistors, integrated circuits, and equipment containing parts that can be damaged as a result of static electricity or electromagnetic force in a manner that prevents such damage IAW MIL-E-17555, sections 3.6 and 3.11.10. Marking shall be IAW MIL-STD-129P and bar coded IAW MIL-STD-1189B or equivalent.
35. The USCG will inspect GFE delivered items prior to prebinning and storage. The Contractor shall inspect and repackage, if necessary, Government furnished OM&S

delivered to the Contractor to meet the requirements of MIL-E-17555. Marking shall be IAW MIL-STD-129P and bar coded IAW MIL-STD-1189B or equivalent.

36. OM&S packaging that will be removed from containers and placed in racks or shelf type stowage shall be designed to protect items against physical and environmental damage during storage. Packaging for parts not stored in storerooms shall be designed for protection against the most severe conditions anticipated to be encountered during storage.
37. Standard bar codes shall be included for the assigned NSN or ACN on the outer cover of the packaged material, as required by MIL-STD-129P and MIL-STD-1189B or equivalent, in addition to any markings required herein.
38. Insurance spares are held for long periods of time. Long term storage items shall be packaged, marked and preserved as required by the CDRL PHS-008.
39. Government Furnished Materiel. The Government will provide and load small arms, ammunition, navigational logs, charts, administrative directives, forms, publications, and subsistence items after SYSTEM delivery. The Government may furnish other material identified in attachments entitled “GFM” and “Government Furnished Information”.

Overview of Contractor Deliverables

SUS-001	Conferences
SUS-002	Conference Minutes
SUS-003	LLTIL
SUS-004	Provisioning Parts Lists
SUS-005	Certificate of Identicality (COI)
SUS-006	Component Identification Data (CID) for Advance RIC
SUS-007	Engineering Data for Provisioning (EDFP)
SUS-008	Tools and Test Equipment List (TTEL)
SUS-009	System Configuration Provisioning List
SUS-010	Design Change Notice
SUS-011	Interim Support Items List
SUS-012	Baseline System Files for Storeroom and Operating Space Items
SUS-013	Outfitting Operations Plan
SUS-014	OSI/SR GUCL Listings
SUS-015	Outfitting Materiel Status Reports
SUS-016	Binned Materiel List
SUS-017	Shipboard Stowage Locations List
SUS-018	Allowance Shortage List
SUS-019	Departure Shortage List
SUS-020	Excess SYSTEM Outfitting Materiel Report

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Provisioning Conference
3. Subtitle (If Applicable).	Agenda
4. Authority.	DI-ADMIN-81249A or equivalent
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK02. If no conference agenda is required this item shall be deleted upon written notification to the Government KO.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review.
BLK10. Frequency shall be per conference or as agreed to at PGC.
BLK12. Submit draft for each conference NLT 30 days prior to PGC for approval of subjects to be covered. Approval copy NLT 10 days prior to PGC.
BLK13. Draft 15 days prior to other scheduled meetings. As soon as possible prior to short notice meetings (short notice is defined as less than 14 days). Final due at event. During the PGC it will be determined if additional conferences are required.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Provisioning Conference Minutes
3. Subtitle (If Applicable).	
4. Authority.	DI-ADMIN-81250A or equivalent
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK02. If no conference minutes are required (when there are no provisioning conferences) this item shall be deleted upon written notification to the government KO.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review.

BLK10. Frequency shall be required per provisioning conference or as agreed to during the PGC.

BLK12. 30 days following PGC.

BLK13. 30 days after each provisioning related conference.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Equipment Long Lead Time Item List (LLTIL)
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80866
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. The contractor shall provide a LLTIL that shall contain those items which may cause delay I production if not ordered in advance of normal provisioning. The Contractor shall specify quantities of each item in the LLTIL within their proposal. The Contractor shall provide a LLTIL IAW the DID.

BLK10. Frequency shall be required for each provisioning conference or as agreed to during the LLTPC.

BLK12. Delivery shall be made during the PGC for GFE and in increments for CFE. Government will provide approval or disapproval within 60 days after contractor delivery. The Contractor shall resubmit 30 days after receipt of the Government's disapproval. Supporting schedules such as, material requirement planning will be provided upon request to the government if schedule problems begin to occur. The level of detail will be agreed upon during the LLTPC.

BLOCK 13. Revisions shall be submitted within 60 days after approval of a change by the Government.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Provisioning Parts List
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review.
BLK10.2. The electronic data product provided shall be compatible with the U.S. Navy ICAPS software (version 5.0 or later) data output format.
BLK10.3. The PPL shall contain the end item, component or assembly an all support items which can be disassembled, reassembled, or replaced and which when combined, constitutes the end item, component or assembly and shall include items such as parts, materials, connecting cables, piping, and fittings required for operation and maintenance of the end item, component, or assembly. The PPL shall be used to determine the range and quantity of support items required to maintain the end item for an initial period of service. This includes all repairable COTS items unless excluded by the provisioning requirements. It does not include a breakdown of GF equipment. The PPL shall include items such as parts, materials, connecting cabling, piping, and fittings required for test equipment, repair parts sets required to maintain the end item, component, or assembly equipment.

For any revisions and/or changes to equipment that has already been submitted, the Provisioning Activity shall be notified within 21 days of approved revision or change. Changes are a result of data that is added, changed or deleted affecting PPL previously delivered. This change shall be submitted as a revision to the original PCCN. Updates shall be submitted IAW the ICAPs user's manual.
Add paragraph 10.5 Data Requirements List – The PPL submission shall provide the Data Elements IAW Attachment 1 to this CDRL, the LMI Specification Data for the PPL. The contractor shall provide a top-down sequence number assignment PTD for PPL. The contractor shall provide the following data elements for each end item. These data elements will be obtained from ICAPS and meet MIL-PRF-49506 requirements and forwarded to the PPA for each PTD submission.
BLK12. Will be determined at the PGC. The Government will provide a letter of approval or disapproval 60 days after receipt of this data item. The Contractor will resubmit 30 days after receipt of the Government's disapproval.
BLK13. Revisions shall be submitted within 60 days after approval of a change by the Government, or if government approval is not required, within 60 days after incorporation of a change when any change is made.
BLK14. The Contractor shall submit this requirement via direct upload/development in ICAPS C/S, or by submitting ICAPS files/ICAPS compatible format files on compact disks or attached to electronic mail (Email).

LMI SPECIFICATION DATA FROM MIL-PRF-49506
FOR THE PROVISIONING PARTS LIST

30	Alternate Indentured Product Code (AIPC)	**830**	Production Lead Time (PLT)
40	Automatic Data Processing Equipment Code	**870**	Provisioning Contract Control Number
120	Change Authority Number	**880**	Provisioning List Category Code (PCCN)
140	Commercial and Government Entity (CAGE) Code	**890**	Provisioning List Item Sequence Number (PLISN)
170	Contractor Technical Information Code (CTIC)	**920**	Provisioning Remarks
180	Controlled Inventory Item Code	**930**	Quantity Per Assembly (QPA) Option 2
190	Criticality Code	**950**	Quantity Per End Item (QPEI) Option 2
230	Demilitarization Code (DMIL)	**1010**	Recommended Minimum System Stock Level
270	End Item Acronym Code (EIAC)	**1030**	Reference Designation
280	Essentiality Code	**1050**	Reference Number
340	Hardness Critical Item (HCI)	**1090**	Replaced or Superseding Provisioning List Item Sequence Number
370	Indenture Code	**1100**	Replaced or Superseding Provisioning List Item Sequence Number Indicator (RS/IND)
380	Indentured Product Code (IPC) (ESWBS/HSC)	**1130**	Rework Removal Rate (RRR)
430	Item Category Code (ICC)	**1150**	(PLISN)
460	Item Designator Code	**1170**	Serial Number Effectivity
480	Item Name	**1190**	Shelf Life (SL)
490	Item Name Code	**1200**	Shelf Life Action Code (SLAC)
540	Maintenance Action Code (MAC)	**1220**	Source, Maintenance and Recoverability (SMR) Code
550	Maintenance Replacement Factor (MRF)	**1230**	Spares Acquisition Integrated With Production (SAIP)

560	Maintenance Replacement Rate I (MRRI)	**1240**	Special Maintenance Item Code (SMIC)
620	Maximum Allowable Operating Time (MAOT)	**1260**	Special Material Content Code (SMCC)
630	Mean Time Between Failures (MTBF)	**1390**	Total Item Change (TIC)
640	Mean Time to Repair (MTTR)	**1400**	Total Quantity Recommended
650	Measurement Base (MB)	**1420**	Type of Change Code (TOCC)
680	National Stock Number and Related Data	**1470**	Unit of Issue (UI)
690	Next Higher Assembly Provision List Item Sequence Number (NHA-PLISN)	**1500**	Unit of Issue Price(UI Price)
700	Next Higher Assembly Provisioning List Item Sequence Number Indicator (NHA-IND)	**1570**	Wearout Life
740	Overhaul Replacement Rate (ORR)	**1440**	Type of Storage Code
790	Precious Metal Indicator Code (PMIC)	**1430**	Type of Price Code
820	Prior Item Provisioning List Item Sequence Number (PRIOR ITEM PLISN)	**1490**	Unit of Issue/Unit of Measure Code

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-005
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Certificate of Identicality
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK04. This data element shall be provided IAW the data requirements and format specified in the LMI Worksheet.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review.
BLK09. Other requests for this document shall be referred to the ICP.
BLK10. For all follow on assets the Contractor shall supply CIO signed by the Contractor to verify that all parts of the developed PPL are identical to that previously submitted.
BLK12. The CIO shall be submitted 30 DACA or as negotiated and finalized at the PGC or as agreed to with the PPA. Government will provide notification of COI approval or disapproval 30 days after receipt of the COI CID.
BLK13. All revisions shall be submitted within 60 days after approval of a change by the government, or if Government approval is not required, within 60 days after incorporation of a change when a configuration change is made.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-006
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Component Identification Data for Advance RIC
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	See Block 16

16. Remarks and Tailoring for Specific Contracts.

BLK04. This data element shall be provided IAW the data requirements and format specified in the LMI Worksheet.

BLK12. Delivery of data needed to request an Advance RIC shall begin eight (8) weeks prior to ship delivery for new construction, 8 weeks prior to Start of Availability (SOA) for Overhaul/Availability, or 8 weeks prior to First Installation for approved Alterations/ECPS unless otherwise specified by the Program Manager.

BLK15. The Contractor shall provide this Advance RIC data using electronic media, compact disks, Electronic mail, or as agreed to during the PGC.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-007
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Engineering Data for Provisioning
4. Authority.	DI-ALSS-81530
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	See Block 16
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK04. The Contractor shall provide EDFP IAW the SOW.
BLK12. Delivery shall be concurrent with all applicable DPDs. Government will provide a letter or approval or disapproval 60 days after receipt of the EDFP. Contractor shall resubmit 30 days after receipt of the Government's disapproval.
BLK13. Revisions shall be submitted within 60 days after approval of a change by the Government and delivered concurrent with the DCNs.
BLK14. The acceptable formats of these engineering drawings are AUTOCAD 2005. The Government will provide additional guidance at the PGC if requested.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-008
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Tools and Test Equipment List
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80868
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK02. If no TTEL required this data item shall be deleted upon written notification to the Government KO.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Contractor shall make incremental deliveries starting 60 days prior to the provisioning conference or as agreed to during the PGC. Government will provide approval 30 days after receipt of final incremental submission. The Contractor shall resubmit 30 days after receipt of the Government's disapproval.

BLK13. Revisions shall be submitted within 60 days after approval of a change by the Government. The submission shall contain the spares and repair parts, tool and test equipment, engineering data for provisioning captured during the Provisioning Item Selection Conference (PISC).

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-009
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	System Configuration Provisioning List (SCPL)
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16 See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	See Block 16

16. Remarks and Tailoring for Specific Contracts.
BLK02. If there is no SLPPL required this data item shall be deleted upon written notification to the Government KO.
BLK04. This data item shall be provided IAW the data elements requirements and format specified in the LMI Worksheet or as agreed to during the PGC.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. Delivery shall be made during the PGC for GFE and in increments for CFE. Government shall provide approval or disapproval within 60 days after contractor delivery. The Contractor shall resubmit 30 days after receipt of the Government's disapproval.
BLK13. Revisions shall be submitted within 60 days after approval of a change by the Government.
BLK15. The Contractor shall submit this requirement via direct upload/development in ICAPS C/S, or by submitting ICAPS files/ICAPS compatible format files on compact disks or attached to electronic mail (Email).

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-010
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Design Change Notice (DCN)
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK02. If no DCNs are required (when the System or equipment contains no configuration changes during the life of the contract) this data item shall be deleted upon written notification to the Government KO.

BLK04. DCN submittal shall include the data elements requirements as identified by the LMI Worksheet.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. If Government approval is not required, 60 days after incorporation of a PN change to the equipment's configuration. Government will provide a letter of approval or disapproval 60 days after receipt of DCNs. The Contractor shall resubmit 30 days after receipt of the Government's disapproval.

BLK13. Revisions shall be submitted within 60 days after approval of a PN change by the Government. The submission shall contain the spares and repair parts, tool and test equipment, engineering data for provisioning captured during the

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-011
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	LMI
3. Subtitle (If Applicable).	Interim Support Items List (ISIL)
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	See Block 16

16. Remarks and Tailoring for Specific Contracts.

BLK02. Contractor shall provide the ISIL only after the contract option for ISS is exercised.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Contractor shall deliver 60 days after contract option for ISS is exercised or as agreed to during the PGC. Government will provide a letter of approval or disapproval 60 days after delivery of provisioning data for ISS. The Contractor shall resubmit 30 days after receipt of the Government's disapproval.

BLK13. Revisions shall be submitted within 60 days after approval of a PN change by the Government; or when Government approval is not required, 60 days after incorporation of a PN change to the equipment's configuration.

BLK15. The Contractor shall submit this requirement via direct upload/development in ICAPS C/S, or by submitting ICAPS files/ICAPS compatible format files on compact disks or attached to electronic mail (Email).

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-012
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Baseline System Files for Store Room and Operating Space Items
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80959
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. The Contractor shall provide and maintain records IAW referenced DID and MIL-STD-1339.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Delivery shall be prepared IAW instructions specified in DID and MIL-STD-1339.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-013
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Outfitting and Operations Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80947
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK02. Contractor shall prepare an Outfitting Operations Plan describing procedures, controls and schedules for procurement and installation of outfitting items.

BLK04. The Contractor shall prepare arrangement drawings that demonstrate the required outfit and furnishings can be accommodated in the spaces allocated in the design. Additionally, an Outfitting Operations plan shall be developed for onboard material which is loaded IAW MIL-STD-1339C.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Submittals requiring approval must state. “This document requires Government approval.” If approval has been granted, the approved version must state. “This document has been reviewed and approved by the Government.” Submittals for a specific hull must state. “This is a final submission (if applicable) for Hull ___.” Incremental submittals and documents regarding recurring meetings or events must identify the specific increment/event date (if not otherwise identified in the subtitle).

BLK13. Revisions shall be submitted within 60 days after approval of a change by the Government. A revision letter and date must be included to reflect the revision of any previously submitted document. The cover sheet must provide a brief explanation of the reason for the change or a more entailed discussion must be included in the content of the submittal.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-014
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	OSI/SRI and GUCL Listings
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80950
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK02. The Contractor shall submit the OSI/SRI and GUCL listings using the same format as initially provided by the Government as outlined by DID and MIL-STD1339C.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Delivery shall be concurrent with the delivery of the System.

BLK13. Revisions shall be submitted within 30 days after approval of a change by the Government.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-015
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Outfitting Material Status Reports
3. Subtitle (If Applicable).	
4. Authority.	
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Outfitting Material Status Reports shall be generated for all outfitting material IAW the Statement of Work and MIL-STD-1339C. Reports shall be created as follows. Binned Material List and Shipboard Stowage Location List.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Delivery shall be submitted within 30 DACA.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-016
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Binned Material List
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80949
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK04. The Contractor shall submit the Binned Material List based on estimate from prior class of the System. In the case of the lead System, projections will be based on Provisioning Technical Documentation estimates and outfitting from Systems of similar classes.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. Delivery shall be prior to acceptance of System
BLK13. Revisions shall be submitted within 30 days after approval of a change by the Government.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-017
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Shipboard Stowage Location List
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80950
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. The Contractor shall provide and maintain records IAW referenced DID and MIL-STD-1339.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Delivery shall be prepared IAW instructions specified in DID and MIL-STD-1339.

BLK13. A revision letter and date must be included to reflect the revision of any previously submitted document. The cover sheet must provide a brief explanation of the reason for the change or a more detailed discussion must be included in the content of the submittal.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-018
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Allowance Shortage List
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80960
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. First submission shall be due 30 days (PRIOR TO) and (AFTER) CDR and shall include all requirements indicated in DID and MIL-STD-1339C. This submittal shall be used to determine the direction and progress of the Contractor's efforts.
BLK13. Second submission shall be due 30 days after the PISC. Submission shall contain the spares and parts, tool and test equipment, and Engineering Data for Provisioning captured during the PISC. Third submission shall be due 30 days after acceptance of System. Revisions shall be due as required through the end of the contract. The Government shall have 30 days for review and acceptance/rejection of each submission.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-019
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Departure Shortage List
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80960
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. The Departure Shortage List shall be provided 15 days prior to each System delivery to the government.

BLK13. The Departure Shortage List shall be submitted weekly after System delivery until all shortages are resolved.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUS-020
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Excess SYSTEM Outfitting Material Report
3. Subtitle (If Applicable).	
4. Authority.	DI-ILSS-80948
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC and ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. In the DID change all references of “Consolidated Shipboard Allowance List (COSAL)” to the latest version of the Government Logistics Supply application.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. Excess Ship Outfitting Material report shall be provided NLT 15 days prior to each System delivery to the Government.

Diminishing Manufacturing Sources and Material Shortages (General Description)

The Diminishing Manufacturing Source and Material Shortages section specifies the management process that minimizes obsolescence problems throughout the life of an System, from the choice of parts in a new design that are not obsolete, through supporting an System during its working life, to predicting when parts used in an System will become obsolete. These CDRLs will be used when developing SOWs for Diminishing Manufacturing Source and Material Shortages management by the contractor.

DIMINISHING MANUFACTURING SOURCES AND MATERIAL SHORTAGES (DMSMS)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure a comprehensive, proactive, DMSMS management program is implemented.
2. Scope. The DMSMS management program for the project will cover all Systems including the Indentured Bills of Material (IBOM) being acquired.

B. Background

1. The USCG conducts thorough and proactive DMSMS programs for all Systems, throughout their life cycle, to mitigate the negative impact of obsolescence.
2. DMSMS cases may occur at any phase in the acquisition cycle, from design and development through post-production. DMSMS cases have the potential to severely impact all aspects of System manufacture, supportability, operational availability, logistics footprint, and life cycle cost.

C. Definitions & Terms

1. DMSMS. The loss or impending loss of manufacturers or suppliers of items or shortages of raw materials.
2. DMSMS Integrated Product Team (DMSMSIPT). Comprised of those contractor personnel who are responsible for implementing the DMSMS Management Program for the project.
3. Joint DMSMSIPT. Comprised of contractor and government personnel who are responsible for providing oversight for the project's DMSMS Management Program.
4. Business Case Analysis (BCA). This is the primary analysis used to select a final recommendation developed under a DMSMS case, and to obtain approval to implement that recommendation from the Government.
5. Government - Industry Data Exchange Program (GIDEP). The GIDEP provides a forum for receiving and exchanging the most up-to-date obsolescence and DMSMS data. This obsolescence and DMSMS data is maintained at the GIDEP in a shared Government data repository (Shared Data Warehouse).
6. Open Systems Architecture for Software. An approach to software development with the stated objective of delivering software with a System that is as "hardware independent" as is technically feasible.
7. IBOM. An IBOM is a listing of parts and required quantities; electronic, electrical, mechanical, and materials, used to identify repair parts or parts needed to fabricate (produce) a System or assembly. It also shows the relationship of components from component to board, to box, to System, generally in a top-down breakout format.
8. DMSMS Management Plan. The DMSMS Management Plan states the program objectives and provides a comprehensive list of DMSMS management roles,

responsibilities, program resources, and procedures. The plan should have provisions to measure the progress and output of this program.

9. DMSMS Tracking and Reporting System. A database used to resolve DMSMS cases. It usually contains the IBOM, part manufacturer data, case data, and generates Management Reports.

10. DMSMS Management Report. A report issued periodically to the Government that provides at a minimum, System DMSMS status, case status, current resolution recommendations, and program metrics.

11. DMSMS Forecasting Source Data. Essential data information that enables the identification, forecasting and management of piece part obsolescence impacts and mitigations as a part of the Project Managers' Total System Life Cycle Management responsibilities. This data is used in DMSMS forecasting tools using a common data standard that enhances efficiency across programs that may share the data on common items. The data may be obtained during any program life cycle phase using sources such as the preferred PL, build-of materials, vendor surveys, inspections, etc.

D. References

1. DoD DMSMS Guidebook; 1 November 2006, SD-22
2. Life Cycle Cost Savings Through Parts Management (Partner Document to MIL-HDBK-512A), SD-19
3. Military Handbook for Parts Management, MIL-HDBK-512A
4. GIDEP Requirements Guide, SO300-BU-GYD-010
5. DMSMS Management Plan Guidance, DI MGMT-80004
6. Source Data for Forecasting DMSMS, DI SESS-81656
7. DMSMS Mitigation/Management Plan, PMA 299
8. Standard for Preparing an Electronic Component Management Plan, EIA-4899

E. Roles & Responsibilities

1. DMSMS Management. The contractor shall establish and maintain a comprehensive and proactive DMSMS management program, IAW references 1 through 8.
2. DMSMSIPT. The contractor shall establish a DMSMSIPT with the stated purpose of implementing the project's DMSMS Management Program. The DMSMSIPT shall develop the DMSMS Management Plan IAW CDRL DMS-001, create and maintain the IBOM, maintain the DMSMS Tracking and Reporting System, produce the DMSMS Management Report, prepare the BCA for each DMSMS case, manage each DMSMS case, and proactively manage the IBOM for future DMSMS issues. The contractor shall host these meetings, and provide meeting minutes IAW CDRL DMS-002.
3. GIDEP. The contractor shall participate in GIDEP for the purpose of receiving and exchanging the most up-to-date obsolescence and DMSMS data, and sharing DMSMS data. A subset of the project's DMSMS data shall be entered into the GIDEP Shared Data Warehouse.

4. DMSMS Forecasting. The contractor shall use forecasting tools and engineering technology assessments to predict part obsolescence. The results of these forecasts will be reflected in the DMSMS Forecast Report IAW CDRL DMS-003. Output from DMSMS forecasting tools and engineering technology assessments will be presented in the report. The report will reflect an understanding of the current status of the planned or current System, the scope of any immediate non-availability and obsolescence problems, the magnitude of future problems, and probable alternatives or courses of action for alleviating the impacts. This report will identify the status of any actions taken to mitigate an issue (ECP, DCN, etc.) or any recommended corrective actions.

   Source Data for forecasting DMSMS shall be submitted IAW CDRL DMS-004.

5. Technology Roadmap. The contractor shall develop a technology roadmap IAW CDRL DMS-005 depicting a System's current planned technology (e.g., processor speed, size, capacity, performance, etc.) mapped against industry technology roadmaps and planned market life expectancy over the proposed life of the System. This mapping will be used with other predictive tools and engineering technology assessments to inform the Project Leadership regarding potential upgrades and opportunities for technology insertion.

6. Interchangeability. When addressing DMSMS cases, the contractor shall select substitute parts that are interchangeable and backward compatible with the parts in the existing System design. For substitute parts under consideration, the contractor shall ensure interchangeability and backward compatibility with the current configuration (product baseline) at the Shop Replaceable Unit/Shop Replaceable Assembly (SRU/SRA) and LRU/Weapons Replaceable Assembly (WRA) levels. Substitution of parts that might result in modifications to the System design will only be considered in order to overcome parts obsolescence, to use a part that is more easily produced, or to correct a latent design deficiency. Changes that affect the form, fit, or function of the part, the System’s functional allocation, or the interface definition will not be considered.

7. Configuration Management. The contractor shall validate the System's TD to ensure all configuration changes due to DMSMS are incorporated into the CM database and drawings. The contractor shall ensure that DMSMS considerations are adequately addressed in the CMP.

8. Parts Management Program. The contractor shall ensure that DMSMS management is adequately addressed in the Parts Management Plan.

9. Supplier and Subcontractor Management. The contractor shall flow-down DMSMS contract requirements to all subcontractors. The contractor shall monitor its subcontractor and suppliers' DMSMS capabilities and efforts.

10. Environmental Impacts. The contractor shall document (in the DMSMS Management Plan), and establish a process to, monitor, plan and implement corrective action to mitigate DMSMS risk associated with changes to environmental laws.

11. Radiation Testing. The contractor shall identify the required type and magnitude of radiation testing for substitute, alternate, or reverse-engineered components required to meet System hardness critical requirements.

Listings of Applicable CDRLS and DIDs for this Section.

CDRL #	Title	Sub-Title	DID No.
DMS-001	Management Plan	DMSMS Management Plan	DI-MGMT-8004A
DMS-002	Report, Record of Meeting/Minutes	DMSMSIPT Meeting Minutes	DI-ADMN-61505 or equivalent
DMS-003	Technical Report - Study/Services	DMSMS Forecast Report	DI-MISC-80508A or equivalent
DMS-004	Technical Report - Study/Services	Source Data for forecasting Diminishing Manufacturing Sources and Material Shortages (DMSMS)	DID DMS-004
DMS-005	Technical Report - Study/Services	Technology Roadmap	DI-MISC-80508A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-DMS-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	DMSMS Management Plan
4. Authority.	DI-MGMT-8004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12 and 13. First submission before System Definition Review. Subsequent submissions for every revision.

DATA ITEM DESCRIPTION

TITLE	DMSMS Management Plan	DID NUMBER	DI-MGMT-8004A
USE Provides a detailed plan for the establishment, implementation and management of the DMSMS Program.		**DATE**	February 2008
		RESPONSIBLE ORG	
		REFERENCES	SOW X.X.X.X; USCG Acq Log Handbook.

ACCEPTANCE CRITERIA

The DMSMS Management Plan will comply with the format and will provide the content specified in the Preparation Instructions section of this DID.

The DMSMS Management Plan will be executable given the program budget and schedule at the time of submission.

The DMSMS Management Plan will be fully coordinated with the dependencies identified in paragraph 8.5.2 of the SOW.

The DMSMS Management Plan will comply with the guidance specified in the USCG Acquisition Logistics Handbook.

PREPARATION INSTRUCTIONS

The DMSMS Management Plan is the detailed plan for the establishment, implementation and management of the acquisition project's DMSMS Program.

This DID contains the format and content preparation instructions for the data product generated by the specific task requirement as delineated in the contract.

This DID is applicable to acquisition of [XXXXXX].

Reference Documents

The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions shall be as specified in the contract.

DATA ITEM DESCRIPTION (continued)

TITLE	DMSMS Management Plan	**DID NUMBER**	DI-MGMT-8004A

Format and Content

The DMSMS Management Plan shall contain the following:

Title page

The title page shall contain the following information.

a. Title
b. CDRL Number.
c. Base name
d. Identification of project
e. Contract DID Number
f. Contractor
g. Date

Table of Contents

The table of contents shall identify all paragraphs and the corresponding page DID Number.

Introduction

The DMSMS Management Plan shall include an introduction, which describes the contractor's approach to managing the loss, or impending loss of manufacturers or suppliers of parts and/or material. The introduction shall.

a. Identify the key participants in the contractor's DMSMS Program and the organizational structure associated with the Program.
b. Identify the major components of the contractor's DMSMS Program.
c. Identify the contractor's DMSMS Program objectives.
d. Identify MSs and scheduling of key events associated with the DMSMS Program.
e. Describe how the components, organizational structure and efforts of the participants are integrated to achieve the contractor's DMSMS Program objectives.
f. Identify the scope of the DMSMS Program and how it will transition to subsequent phases of the acquisition project that are not covered by this contract.

DATA ITEM DESCRIPTION (continued)

TITLE	DMSMS Management Plan	**DID NUMBER**	DI-MGMT-8004A

Part 1. DMSMS Program Organization

In Part 1 of the DMSMS Management Plan, the contractor shall address the organization required to establish, implement and manage the contractor's DMSMS Program. Part 1 will contain the following elements.

1. DMSMS Program Organization Chart. The contractor shall provide a chart that identifies specific individuals involved in DMSMS Program, their job titles, their function, their reporting relationships, their contact information (email address and phone number), and their government counterparts. The chart shall specifically address the organizational structure of the DMSMSIPT and its reporting relationships within the broader acquisition project organizational structure. The contractor shall submit an updated chart annually.

2. DMSMSIPT Plan and Procedures.
   a. The contractor shall provide a plan for establishing a DMSMSIPT. The plan will identify.
      i. The steps leading to the DMSMSIPT becoming fully operational.
      ii. The specific dates by which the steps will be accomplished.
      iii. The FAC the DMSMSIPT will occupy.
      iv. Working Groups that will be chartered by the DMSMSIPT, their primary purpose, and the date by which they need to be operational.
   b. The contractor shall provide a set of procedures for the DMSMSIPT Working Groups. For each Working Group, the procedures will.
      i. Identify the scope of authority.
      ii. Identify the primary inputs and outputs.
      iii. Identify the term of the charter (operational date and expiration date).
      iv. Identify the frequency of meetings and whether the meetings can be "virtual" or they need to be face-to-face.
      v. Identify required members, including government participants.
      vi. Identify the primary inputs and outputs.
      vii. Identify project MSs and design reviews supported and how they are supported.
      viii. Identify the reporting relationships with other Working Groups on the project.
      ix. Identify the reporting relationships within the DMSMSIPT and with the leadership of the project.

3. Roles and Responsibilities. The contractor shall provide a list of roles and responsibilities as they pertain to the establishment, implementation and management of the DMSMS Program. To facilitate quick reference, the contractor will create hyperlinks between the DMSMS Organization Chart and the individuals and organizations identified in the list of Roles and Responsibilities.

DATA ITEM DESCRIPTION (continued)

TITLE	DMSMS Management Plan	**DID NUMBER**	DI-MGMT-8004A

Part 2. DMSMS Case Resolution Process

In Part 2 of the DMSMS Management Plan, the contractor shall describe the process by which DMSMS Cases will be resolved. The description will include:

1. A DMSMS Case Resolution Process Flowchart. The flowchart will identify:
   a. All individuals and organizations involved in the process.
   b. All tasks and activities in the process.
   c. Tasks and activities that can be accomplished concurrently.
   d. Task and activity dependencies.
   e. Key decision points.
   f. How resolution of a DMSMS Case may influence design and provisioning decisions.
   g. The role of the DMSMS Tracking and Reporting System.
   h. The link of the DMSMS Case Resolution Process and the following.
      i. Parts Management.
      ii. Configuration Management.
      iii. The Interchangeability Parts List.
      iv. The Bill of Materials.
      v. The Source List.
2. A narrative explanation of the process depicted in the DMSMS Case Resolution Process Flowchart.

Part 3. Overview of the DMSMS Tracking and Reporting System.
In Part 3 of the DMSMS Management Plan, the contractor shall describe how the DMSMS Tracking and Reporting System will serve to facilitate the timely resolution of DMSMS cases and support project decision making. To that end, the contractor shall identify.

1. The type of reports the System will generate and their intended purpose.
2. The cost and performance metrics that will be used to assist in managing the DMSMS Program and the intended purpose of monitoring those metrics.
3. The source for the data underlying the cost and performance metrics as well as any potential latency issues related to the data.
4. How the DMSMS Tracking and Reporting System will be tied to databases used for CM and Parts Management purposes.
5. How the DMSMS Tracking and Reporting System will be used to update the following.
   a. The Interchangeability Parts List.
   b. The Bill of Materials.
   c. The Source List.
   d. GIDEP Shared Data Warehouse
6. How the DMSMS Tracking and Reporting System will support project MSs and design reviews.

DATA ITEM DESCRIPTION (continued)

TITLE	DMSMS Management Plan	**DID NUMBER**	DI-MGMT-8004A

Part 4. Procedures for Emergency Resolution of DMSMS Cases
In Part 4 of the DMSMS Management Plan, the contractor shall describe the procedures for the emergency resolution of a DMSMS Case. The description will include.

1. A statement of the conditions that must exist to warrant the emergency resolution of a DMSMS Case.
2. A process flowchart depicting the procedures for the emergency resolution of DMSMS Cases. The flowchart will identify.
    a. All individuals and organizations involved in the process.
    b. All tasks and activities in the process.
    c. Tasks and activities that can be accomplished concurrently.
    d. Task and activity dependencies.
    e. Key decision points.
    f. How the emergency resolution of a DMSMS Case may influence design and provisioning decisions.
    g. The role of the DMSMS Tracking and Reporting System.
    h. The link of the emergency resolution of a DMSMS Case and the following.
        i. Parts Management.
        ii. Configuration Management.
        iii. The Interchangeability Parts List.
        iv. The Bill of Materials.
        v. The Source List.
3. A narrative explanation of the procedures depicted in the process flowchart for the emergency resolution of a DMSMS Case.

Part 5. Security Guidelines (if applicable)

In Part 5 of the DMSMS Management Plan, the contractor shall provide security guidelines as they apply to the establishment, implementation and management of the DMSMS Program,

Part 6. DMSMS Forecasting and Technology Roadmap

In Part 6 of the DMSMS Management Plan, the contractor shall describe the DMSMS forecasting process, the forecasting tool(s) to be used, how forecasts will influence part choice, and other strategies for proactive DMSMS management. The contractor shall describe how a Technology Roadmap shall be developed for every end item, which at a minimum, will describe how an end item's technology will evolve over the next ten years and how this will impact the end item in terms of obsolescence issues, modifications and upgrades.

Page 5 of 5

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-DMS-002
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Report, Record of Meeting/Minutes
3. Subtitle (If Applicable).	DMSMS IPT Meeting Minutes
4. Authority.	DI-ADMN-61505 or equivalent
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK 08. Government review and approval for content, accuracy, and completeness. Allow 30 days for government review.

BLK 12. Submission shall be done no later than (NLT) 14 days after meeting adjournment.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-DMS-003
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Diminishing Manufacturing Sources and Material Shortages Forecast Report
4. Authority.	DI-MISC-80508A or equivalent
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	QRTLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace Section 3 (c) with.
(1) Introduction
(2) Current status of the planned or current System.
(3) The scope of any immediate non-availability and obsolescence problems.
(4) The size and magnitude of future problems.
(5) Alternatives or courses of action for alleviating the impacts.
(6) Status of any actions taken to mitigate an issue (ECP, DCN, etc.) or any recommended corrective actions.
(7) System Vendors Surveyed.
(8) Alternate Supply Sources.
(9) Repair Data Development Status.
(10) COTS Procurement Status.
(11) Status of COTS Items Under Repair and Related Repair Issues.
(12) ECP Development Status and Issues.
(13) COTS Obsolescence Item List Additions/Deletions.
(14) Related COTS Issues.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review. BLK12. First submission before System Definition Review, and quarterly thereafter.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-DMS-004
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	
4. Authority.	DID DMS-004
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 30 days for government review.
BLK12. Government shall have full access to view this data at all times. Submission shall start prior to the CDR. All subsequent submissions shall be made as data is required for forecast reports.

DATA ITEM DESCRIPTION

<table>
<tr><td>TITLE</td><td>Source Data for Forecasting Diminishing Manufacturing Sources and Material Sources (DMSMS)</td><td>DID NUMBER</td><td>DMS-004</td></tr>
<tr><td colspan="2" rowspan="3">USE. The purpose of this CDRL is to establish the format and content of the DMSMS forecasting source data submitted by the contractor. This CDRL contains the format, content, and intended use information for the data product resulting from the work task described by the contract.</td><td>DATE</td><td>February 2008</td></tr>
<tr><td>RESPONSIBLE ORG</td><td>N/DASN-L</td></tr>
<tr><td>REFERENCES</td><td>SOW X.X.X.X; USCG Acq Log Handbook.</td></tr>
<tr><td colspan="4">PREPARATION INSTRUCTIONS
The contractor shall use forecasting tools and engineering technology assessments to predict part obsolescence. The DMSMS forecasting source data is essential information that enables the identification, forecasting and management of piece part obsolescence impacts and mitigations as a part of the DoD Program Managers' Total System Life Cycle Management responsibilities. This data is used in DMSMS forecasting tools using a common data standard that enhances efficiency across programs that may share the data on common items. The data may be obtained during any program life cycle phase using sources such as the preferred PL, build-of materials, vendor surveys, inspections, etc. The results of these forecasts will be reflected in the DMSMS Forecast Report.

Page 1 of 3</td></tr>
</table>

DATA ITEM DESCRIPTION (continued)

TITLE	Source Data for Forecasting Diminishing Manufacturing Sources and Material Sources (DMSMS)	**DID NUMBER**	DMS-004

Requirements.

1. Format. The DMSMS Forecasting Source Data shall be in an editable electronic format using XML data standards.
2. Content. The DMSMS Forecasting Source Data shall include the following minimum information for the level specified by the contract.

E-BOM Data Fields for System Level
OEM
OEM CAGE
OEM PN
Revision Level
Firmware Version
Reference Designator or Next Higher Assembly
Nomenclature
Quantity on Platform
National Item Identification Number (NIIN)

E-BOM Data Fields for LRU Level
OEM
OEM CAGE
OEM PN
Known Alternate PNs
Revision Level
Firmware Version
Reference Designator or Next Higher Assembly
Nomenclature
Quantity used in System
NIIN

DATA ITEM DESCRIPTION (continued)

TITLE	Source Data for Forecasting Diminishing Manufacturing Sources and Material Sources (DMSMS)	**DID NUMBER**	DMS-004

E-BOM Data Fields for LRU Component Level

OEM
OEM CAGE
OEM/Source or Specification Control Drawing (SCD) Piece-PNs
OEM/SCD Piece-Part Reference Designator or Next Higher Assembly
OEM/SCD Piece-Part Nomenclature
OEM/SCD Piece Part Quantity on LRU
OEM/SCD Piece Part Revision Level
OEM/SCD Piece Part Firmware Version
Actual Vendor Piece-PNs
Actual Vendor Piece-Part Cage
Known Alternate Piece-PNs & Cages
NIIN

Page 3 of 3

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-DMS-005
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Technology Roadmap
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace paragraph 3 (c) with.
(a) Title Page - Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.
(b) Table of Contents
(c) Section I - Includes the following.
(1) Current Technology in the end item.
(2) Technology trend analysis for the end item.
(3) Possible future technology replacements.
(4) Graphical Representation of Section (2)
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. First submission before PDR.

Standardization (General Description)

The Standardization section specifies a management program that provides for common usage of equipment, components, parts, and materials to promote commonality among Systems. A Standardization program maximizes the use of non-developmental items, standard parts, reliable parts, common publications, manuals and training aids, common materials and processes, to lower cost, reduce down-time, facilitate interchangeability, and promote commonality. These CDRLs will be used when developing SOWs for a Standardization management program by the contractor.

STANDARDIZATION (STD)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure the contractor develops and manages a STD Program. The contractor will economically plan, integrate, and develop the STD Program in conjunction with other engineering and logistics support planning functions.
2. Scope. The STD program for the project will cover all Systems being acquired.

B. Background

1. STD provides for common usage of equipment, components, parts, and materials to promote commonality among Systems. It maximizes the use of non-developmental items, standard parts, reliable parts, common publications, manuals and training aids, common materials and processes, to lower cost, reduce down-time, facilitate interchangeability, and promote commonality.
2. STD shall be given prime consideration during the performance of the SUA throughout all acquisition phases. The contractor shall consider such factors as complexity of design, availability of competitive suppliers, interface with existing or future USCG Systems, DMSMS, and logistics support. The STD program shall be an integral part of the design, development, testing and production processes and shall establish goals for each of these aspects.
3. The contractor shall establish management procedures to assure repetitive use of items and features within an equipment or System, promote commonality among Systems and equipment (including support equipment), reduce the incidence of repetitive design of similar items, and prevent unnecessary items from entering the USCG inventory. The contractor shall establish procedures to control proliferation of the types and kind of hardware/software being procured, as part of, or in support of, the acquisition.
4. STD advances interoperability through commonality of Systems, subsystems, components, equipment, data, and architectures. The program manager balances decisions to use standard Systems, subsystems, and SUE against specific capabilities (including corresponding information System elements that perform critical, essential, or support functions within each joint functional capability), technology growth, and cost effectiveness.
5. Program managers should consider compliance with international standardization agreements, such as the North Atlantic Treaty Organization (NATO) Standardization Agreements, or the agreements of the Air and Space Interoperability Council (formerly known as the Air Standards Coordinating Committee) or American-British-Canadian-Australian Armies Standardization Program. The program manager should identify any international STD agreements or U.S. implementing documents that apply to the program early in the design process to ensure interoperability with combined and coalition Systems and equipment.

C. Definitions & Terms. STD is the use of the same or common items across multiple functions or applications where economically feasible. Use of STD facilitates the interchangeability of

equipment and parts and reduces training requirements. Additionally, standard interfaces allow for various Systems to be linked or integrated.

D. References

a. Defense Standardization Program (DSP), Policies and Procedures, March 2000, DoD 4120.24-M

b. Parts Management, MIL-STD-3018

c. Coast Guard Standardization Program, COMDTINST 4200.38 (series)

E. Roles & Responsibilities

a. Standardization Program Plan (SPP). The contractor shall develop and deliver a SPP. The plan shall identify the STD procedures, goals, and metrics the contractor shall use to maximize standardization. The contractor shall implement the standardization program between the prime contractor and its suppliers/vendors to assure compliance with the objectives of this section. The contractor shall deliver the SPP IAW CDRL STD-001.

b. Standardization Management Procedures. The contractor shall document management procedures so as to verify or demonstrate that specific requirements are or have been performed. The contractor shall demonstrate compliance IAW CDRL STD-002.

c. Standardization Program Assessments. STD program assessments to review progress in achieving program goals and to determine what program refinements are necessary, will be part of the PDR, CDR, and Production Readiness Review (PRR).

The contractor shall implement the STD program between itself and its subcontractors and suppliers/vendors, to assure compliance with the objectives of this section.

Listings of Applicable CDRLS and DIDs for this Section.

CDRL #	Title	Sub-Title	DID No.
STD-001	Management Plan	Standardization Program Plan (SPP)	DI-MGMT-80004A
STD-002	Standardization Accomplishment Report (SAR)	None	DI-GDRQ-80941

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-STD-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	Standardization Program Plan (SPP)
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DOD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. The SPP shall be developed IAW MILSTD 3018 Parts Management.
Modify the DID as follows.
Replace paragraph 3 with.
(1) Introduction
(2) STD Program Goals
(3) STD Procedures - Procedures contractor will use to maximize STD.
(4) Metrics - Metrics used to measure STD program.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. First submission before System Definition Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-STD-002
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Standardization Accomplishment Report (SAR)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-GDRQ-80941
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12 and 13. First submission before System Definition Review.

Parts Management (General Description)

The Parts Management section specifies the process of reducing total cost of ownership and increase logistics readiness, promote interoperability, enhance the interchangeability, reliability, and availability of parts, minimize DMSMS impacts, assist in meeting end item performance goals, assist with parts selection and qualification procedures, and minimize the proliferation of parts and drawings. These CDRLs will be used when developing SOWs for a Parts Management program by the contractor.

PARTS MANAGEMENT (PMT)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure PMT considerations are fully incorporated into the System's design.
2. Scope. The PMT Plan for the project shall cover all Systems being acquired.

B. Background

PMT is a process to reduce total cost of ownership and increase logistics readiness, promote interoperability, enhance the interchangeability, reliability, and availability of parts, minimize DMSMS impacts, assist in meeting end item performance goals, assist with parts selection and qualification procedures, and minimize the proliferation of parts and drawings.

C. Definitions & Terms

1. Parts Management. The practice of considering the application, standardization, technology (new and aging), System reliability, maintainability, supportability, and cost in selecting parts and addressing availability, logistics support, DMSMS, and legacy issues in supporting them throughout the life of the Systems.
2. Program Parts Selection List (PPSL). Parts selected by the contractor or subcontractor(s) and a GF Baseline provided by the DOD Military Parts Control Advisory Group and the USCG.
2. Parts Management Plan. A contract-specific application of a contractor's corporate PMT procedures which meets the objectives of the equipment System's mission profile, support strategy, expected service life, and USCG parts management goals and objectives.
3. Part. One or more pieces joined together, which are not normally subject to disassembly without destruction or impairment of intended design use.

D. References

1. Parts Management, MIL-STD-3018
2. Recommended Practice for Parts Management, AIAA-R100
3. Life Cycle Cost Savings Through Parts Management, SD-19
4. Defense Standardization Program (DSP), Policies and Procedures, March 2000, DoD 4120.24-M
5. Coast Guard Standardization Program, COMDTINST 4200.38 (series)

E. Roles & Responsibilities

1. Parts Management Program. The contractor shall develop and manage a parts management program IAW MIL-STD-3018. At a minimum, the PMT program shall consist of:
   a. A documented parts selection process.

b. A parts selection baseline.

c. A corporate baseline.

d. A parts selection list, or other database, to give visibility to designers and subcontractors of parts preferred for use.

e. A PPSL made up of parts selected by the contractor or subcontractor(s) and a GF Baseline provided by the DOD Military Parts Control Advisory Group.

f. Procedures for incorporating DMSMS management into the parts selection process.

g. Verification of compliance of subcontractor PMT programs.

h. A documented process for assessing part suppliers and part quality such as statistical process control data, audits, past performance, etc.

i. A documented process for the management and documentation of parts, other than those on an as-built or as-designed PL.

j. Metrics to measure program success.

2. Parts Management Plan. The contractor shall develop a PMT Plan, IAW CDRL PMT-001. The PMT Plan shall describe the program management process, the parts selection process, DMSMS mitigation strategy, program metrics, and Government participation.

3. The contractor shall economically plan, integrate and develop the PMT program in conjunction with other engineering and logistics support planning functions.

4. The Government shall have the right to review and approve PMT data, and have viewing rights into these lists and databases at the government's discretion.

5. The Government shall provide the GF Baseline to the contractor.

6. The PMT Program shall be implemented between the prime contractor and his suppliers/vendors to assure compliance with the objectives of this section.

7. The contractor shall select parts suitable to the design application in the descending order of preference as follows:

   (a) Parts required to meet a Government regulatory organizations’ regulations

   (b) Military or Government standard parts

   (c) Parts defined by standards produced by recognized industry committees or groups

   (d) Corporate standard type parts

   (e) Parts identified by manufacturer PNs controlled by their drawings, catalogs, or company standards or source control drawings or vendor item drawings.

Listings of Applicable CDRLS and DIDs for this Section

CDRL #	Title	Sub-Title	DID No.
PMT-001	Parts Management Plan	None	DI-SDMP-81748

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PMT-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Parts Management Plan
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-SDMP-81748
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. First submission shall be made before System Definition Review.

Human Systems Integration (General Description)

1. The program manager should work with manpower, personnel, training, human factors, system safety, health hazards and personnel survivability communities to translate and integrate the Human Systems Integration thresholds and objectives contained in the capabilities documents into quantifiable and measurable System requirements. The program manager then includes these requirements in specifications, the TEMP, and other program documentation, as propionate, and uses them to address Human Systems Integration in the statement of work and contract. The program manager identifies any Human Systems Integration -related schedule or costs issues that could adversely impact program execution; the System's support strategy should identify responsibilities, describe the technical and management approach for meeting Human Systems Integration requirements, and summarize major elements of the associated training System. Human Systems Integration initiatives optimize total System performance and minimize total ownership cost. The following Human Systems Integration topics are separately addressed in-depth in the section:

   a. Manpower and Personnel Initiatives
   b. Training and Training Equipment
   c. Human Factors Engineering
   d. System Safety
   e. Health Hazards
   f. Personnel Survivability and Habitability

2. Total System Approach

   The total System includes not only the prime mission equipment, but also the people who operate, maintain, and support the System; the training and training devices; and the operational support infrastructure. Human Systems Integration analysts assist program managers by focusing attention on the human part of the System and by integrating and inserting manpower, personnel, training, human factors, system safety, health hazards and personnel survivability considerations into the USCG acquisition process.

Manpower and Personnel (General Description)

1. Manpower and Personnel (MAP) involves identification and acquisition of personnel with skills and grades required to operate, maintain, support, and instruct a System over its lifetime. Manpower requirements are developed and personnel assignments are made to meet support demands throughout the life cycle of the System. Manpower requirements are based on related ILS elements and other considerations. Human factors engineering (HFE) or behavioral research is frequently applied to ensure a good man-machine interface.

2. MAP is the term used to represent the people required to operate and support the System (including its support) over its planned life cycle. MAP analysis is the process conducted to identify and acquire military and civilian personnel with the skills and grades required to operate and support the System over its planned lifetime at both peacetime and wartime rates. Acquisition logistics efforts should strive to minimize the quantity and skill levels of MAP required to operate and support the System, since MAP can be expected to be a major, if not the major, contributor to System LCC.

3. MAP certainly continues to constitute the largest component of the CG budget. To cope with this, CG has been forced to greatly simplify man/machine interfaces and utilize built-in test/fault isolation devices to reduce, at least at the organizational level of maintenance, the skill levels required of personnel who operate and maintain the Systems. This approach has resulted in more complex and costly automated information Systems and subsystems. Highly skilled individuals (college graduates entering the CG, motivated individuals who can be trained, etc.) are generally required to maintain the increasingly sophisticated types of software. This trend toward more information technology (IT) continues unabated.

4. The unique characteristics and skills of individuals available now, and projected into the future, to operate and maintain complex Systems at all levels must influence basic design decisions. Allocation of functions to hardware and to software must be logically made to ensure compatibility between the required and available individuals.

5. Manpower requirements are predicated on accomplishing the logistics support mission in the most efficient and economical way. This element includes requirements during the planning and decision process to optimize numbers, skills, and positions. This area considers:

   a. Man-machine and environmental interface.

   b. Special skills.

   c. Human factors considerations during the planning and decision process.

MANPOWER AND PERSONNEL (MAP)

A. General Overview

1. Purpose. This section describes the requirements for developing staffing levels support. It identifies specific information and material requirements the Contractor will furnish to meet personnel requirements. This section also applies to staffing requirements for shore support personnel who will support the System once delivered.
2. Scope. The MAP requirements for the project will cover all Systems being acquired.

B. Background

System staffing is based upon the Manpower Estimate Report (MER) developed by the Government during the Pre-Acquisition Activity, operational requirements, maintenance philosophy and requirements, and unit support requirements. The MER is a starting point for personnel analysis by the contractor. Throughout the acquisition activity; personnel information furnished by the contractor will be aligned with the HFE design criteria. The System staffing will change due to design and support philosophy changes.

C. Definitions & Terms

Maintainability. Maintainability refers to the ease of maintenance. Ease of maintenance includes physical access with required tools, ease of removal and replacement of parts, visual access if required.

D. References

1. U.S. Coast Guard Regulations, COMDTINST M5000.3 (series)
2. Coast Guard Staffing Standards Manual, COMDTINST M5312.11 (series)
3. Coast Guard Enlisted Performance Qualifications Manual, COMDTINST M1414.8 (series)
4. Coast Guard Cutter Training and Qualifications Manual, COMDTINST M3502.4 (series)
5. U.S. Coast Guard Competency Management System Manual, COMDTINST M5300.2 (series)

F. Roles & Responsibilities

1. The Contractor shall provide a MRA IAW CDRL MAP-001. The MRA shall be developed IAW U.S. Coast Guard Staffing Standards Manual, COMDTINST M5312.11 (series) and U.S. Navy Manual of Navy Total Force Manpower Policies and Procedures.
2. The contractor shall document consideration of the following requirements in the System MRA:
   (a) The contractor shall identify operational and maintenance workload aligned with the System design.
   (b) The contractor shall develop the MRA to be compatible with the documented maintenance and operational concepts.

(c) The contractor shall ensure the MRA accounts for all military (Active Reserve, and Auxiliary), DHS civilian (U.S. and foreign national), and contract support manpower.

(d) In the MRA, the contractor shall identify billets to the rank/rate/grade level necessary to operate and maintain the System under the conditions for which it was designed.

(e) The contractor shall ensure the MRA reflects the function allocations to equipment or personnel so as to achieve reliable System performance with the needed sensitivity, precision, time, and safety at the minimum level skills required to maintain and operate the System.

(f) The contractor shall ensure the MRA results align with USCG workforce and training parameters (constraints). The contractor shall contact the USCG SME for guidance as directed by the contracting officer.

(g) The contractor shall ensure the MRA addresses contractor personnel working in FAC in addition to or instead of government employees.

(h) The contractor shall ensure the MRA reconciles with USCG Human Resources in advance of outsourcing operational support services conclusions to ensure that sufficient workload is retained in-house to adequately provide for career progression and sea-to-shore rotation.

(i) The contractor shall identify in the MRA the governmental and exempted commercial functions that are not being outsourced.

(j) The contractor shall ensure the MRA identifies labor-intensive (high-driver) tasks as candidates for design changes that increase equipment or software performance and eliminate workload.

(k) The contractor shall base the MRA on task analyses that are conducted during the functional allocation process and consider all factors including fatigue; cognitive, physical, sensory overload; environmental conditions (e.g., heat/cold), and reduced visibility.

(l) The contractor shall ensure the MRA considers personnel capabilities, training, and HFE trade-offs.

(m) The contractor shall ensure the MRA, to the extent possible, does not require special cognitive, physical, or sensory skills beyond that found in the specified user population.

(n) The contractor shall ensure the MRA identifies billets that demand skill requirements that exceed the knowledge, skills, and abilities of current CG occupational specialties or that require additional skill indicators or hard-to-fill CG occupational specialties.

(o) The contractor shall ensure the MRA addresses specific, scenario-based, factors that affect personnel requirements, such as surge requirements, environmental conditions, and expected duration of the employment.

(p) The contractor shall ensure the MRA identifies the personnel capable of managing, supporting, maintaining, operating, and repairing the system in the planned operational and maintenance environments with provided training.

(q) The contractor shall revise the MRA throughout the Acquisition Activity during the three phases of Analyze/Select Phase, Obtain Phase, and Production & Deployment or as directed by the USCG.

(r) The contractor shall deliver and update the MRA within 30 days prior to Acquisition Activity MSs.

(s) The contractor may indicate changes to the MRA by referencing past reports rather than by duplicating an entire set of data, information, or plans.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
MAP-001	Technical Study	Manpower Requirements Analysis	DI-MISC-80508B

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-MAP-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report-Study/Services
3. Subtitle (If Applicable).	Manpower Requirements Analysis
4. Authority.	DI-MISC-80508A
5. Contract Reference.	SOW X.X.X.X
6. Requiring Office.	CG-1B
7. DD 250 (Material Inspection & Receiving Report) Required.	See Block 16
8. Approval Code.	See Block 16
9. Distribution Statement Required.	
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	CG1B, PRO, Project Office
15. Total.	Electronic copy. Yes

16. Remarks and Tailoring for Specific Contracts.

Block05. Modify the DID as follows.

Requirements.

1. General
   (a) The system MRA shall be a comprehensive analysis which incorporates.
      (1) System MRA data
      (2) Logistics shore support MRA data
      (3) CG billet recommendations and changes to all affected activities in CG PAL format provided as GFI.
   (b) The MRA shall address contractor personnel working in FAC in addition to or instead of government employees.
   (c) The MRA shall be revised throughout the Acquisition Activity during the three phases of Analyze/Select Phase, Obtain Phase, and Produce/Deploy Support.
      (1) Initial delivery and updates shall be aligned with Acquisition Activity MSs.
      (2) MRA shall evolve from the System thorough the complete support

infrastructure manpower requirements during the Acquisition Activity.

(3) MRA shall support the CG Resource Proposal processes and the Future Year Homeland Security Program (FYHSP) development schedule.

(4) MRA shall be guided by the CG Resource Proposal System acquisition plan for the System.

(5) MRA changes may be indicated by reference to past reports rather than by duplication of an entire set of data, information, or plans

2. Content.

(a) The System Level MRA format shall include the following separate sections to include.

(1) Title Page - Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.

(2) Table of Contents

(3) Executive Summary. This section summarize key recommendations and conclusions reached in the analysis formulation

(4) Introduction. This section shall include the objectives and scope as well as an overview of the presented analysis. This document shall also summarize analysis that was not covered due to constraints such as budget, available information or time.

(5) MRA Terminology. this section shall cover key acronym definitions that will be used in all MRA analysis to follow.

(6) System Manpower Requirements. this section shall include a description of all work covered under the MRA analysis and summary of the results for the System/System (e.g., cutter crew or notional air station). Crewing schemes and siting plans affecting requirements shall be addressed (e.g., staffing calculators based on variables such as number of airframes assigned or operational demand).

(7) Support Facilities Manpower Requirements. This section shall include a description of all work covered under MRA analysis and summary of the results for the infrastructure supporting the System (e.g., Electronic Support Unit, Product Line management, Training Center instructors) Crewing schemes and siting plans affecting support requirements shall be addressed (e.g., staffing calculators based on variables such as number of airframes assigned or operational demand). Give a brief description and over view of all shore support FAC in the CG relevant to the System.

(8) Program Manpower Requirements. This section shall include a projected manpower estimate across System and impacted FAC based on the CG acquisition plan reflected in current President's budget. It shall cover the period from first delivery minus three years to FOC plus three years.

(9) Conclusion & Recommendations. this section shall incorporate analysis results, recommendations, opportunities for further analysis, gaps in current analysis, and path forward for future MRA deliverables.

(10) Appendices. this section shall include a complete list of all acronyms called out in the document, complete Preliminary Manning Document appropriate to the System/Facility, Billet Requirements in CG PAL, manning calculators, rate/rank matrix, PM/CM analysis, FM analysis, and other

supporting analyses (e.g., Watch Quarter Station Bill, Simultaneity matrix, aviation crew seat ratio analysis).

BLK08. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by Commandant (CG-1B). Electronic copies shall be sent directly to the USCG Project Office or the organization designated by Commandant (CG-1B).

BLK12. The MRA submission shall be made prior to PDR

BLK 13. The MRA update submissions shall be made prior to Test Readiness Review, Operational Readiness Review (ORR) and Post Implementation Review (PIR)

LMI SPECIFICATION DATA for
USCG Personnel Allowance List (PAL) Data Fields

DEPTID
UNITID
ATU
OPFAC
MOD
DEPTNAME
HULL_NBR
DEPT_TYPE
MISSION_TYPE
SOURCE
POSN_TYPE
POSITION_NBR
BCN
JOBCODE
POSN_RANK
JOB_FAMILY
AO_CODE
POSN_STATUS
EFF_STATUS
POSN_PLAN
GRADE
POSN_TITLE
OCCUPATION_INFO
ASSIGN_COUNT
APPROP
POSN_PERM_CODE
LIASON
CURRENT_POSITION_INITIATIVE
PROJECT
SPONSOR
EXPIRATION_DT
LAST_PAA
APPROVAL_DT
PACKAGEID
CONG_DIST
STATE
CITY
BG_FILE
POSN INCUMBERED
ORG_LEVEL2
ORG_LEVEL3
ORG_LEVEL4
ORG_LEVEL5
ORG_LEVEL6
ORG_LEVEL7

DATA ITEM DESCRIPTION

TITLE	Manpower Requirements Analysis (MRA)	**DID NUMBER**	MAP-001
USE. The Contractor shall provide a MRA. The MRA shall be developed IAW U.S. Coast Guard STAFFING STANDARDS MANUAL, COMDTINST M5312.11 (series).		**DATE**	February 2008
		RESPONSIBLE ORG	
		REFERENCES	SOW X.X.X.X; USCG Acq Log Users Handbook.

ACCEPTANCE CRITERIA

A. The MRA the USCG has the necessary information to develop manpower requirements including.

1. operating crew models,
2. task analysis and allocation,
3. function analysis and allocation,
4. operational analysis,
5. maintenance analysis, and
6. ship, air station, and facility manpower documents to include operational and support manpower requirements related the System and the supporting rationale for all decisions concerning the billet development process.

B. The contractor shall submit this CDRL considering Government comments provided under previous Delivery Task Order (DTO). If there are no changes from the previous submission or no comments to be incorporated, the contractor shall submit a letter indicating no changes from previous submittal.

C. This is a report that provides the details of the development and results of the System manpower requirements analyses. Included, but not limited to, in this document are. operating crew models, task analysis and allocation, function analysis and allocation, operational analysis, maintenance analysis, and ship, air station, and facility manpower documents to include operational and support manpower requirements related to the System and the supporting rationale for all decisions concerning the billet development process.

DATA ITEM DESCRIPTION (continued)

TITLE	Manpower Requirements Analysis (MRA)	DID NUMBER	MAP-001

D. The contractor shall document consideration of the following requirements in the System MRA.

1. The contractor shall identify operational and maintenance workload aligned with the System design.
2. The contractor shall design the System to be compatible with the expected maintenance and operational concepts.
3. The contractor shall ensure the MRA accounts for all military (Active Reserve, and Auxiliary), DHS civilian (U.S. and foreign national), and contract support manpower.
4. In the MRA, the contractor shall identify billets to the rank/rate/grade level necessary to operate and maintain the System under the conditions for which it was designed.
5. The contractor shall ensure the MRA reflects the function allocations to equipment or personnel so as to achieve reliable System performance with the needed sensitivity, precision, time, and safety at the minimum level skills required to maintain and operate the System.
6. The contractor shall ensure the MRA accommodates workforce and training issues.
7. The contractor shall ensure the MRA addresses contractor personnel working in FAC in addition to or instead of government employees.
8. The contractor shall ensure the MRA reconciles with USCG Human Resources in advance of outsourcing operational support services conclusions to ensure that sufficient workload is retained in-house to adequately provide for career progression and sea-to-shore rotation.
9. The contractor shall document in the MRA that inherently governmental and exempted commercial functions are not outsourced.
10. The contractor shall ensure the MRA identifies labor-intensive (high-driver) tasks as candidates for design changes that increase equipment or software performance and eliminate workload.
11. The contractor shall base the MRA on task analyses that are conducted during the functional allocation process and consider all factors including fatigue; cognitive, physical, sensory overload; environmental conditions (e.g., heat/cold), and reduced visibility.
12. The contractor shall ensure the MRA considers personnel capabilities, training, and HFE trade-offs.

DATA ITEM DESCRIPTION (continued)

TITLE	Manpower Requirements Analysis (MRA)	DID NUMBER	MAP-001

13. The contractor shall ensure the MRA, to the extent possible, does not require special cognitive, physical, or sensory skills beyond that found in the specified user population.
14. The contractor shall ensure the MRA identifies billets that demand skill requirements that exceed the knowledge, skills, and abilities of current CG occupational specialties or that require additional skill indicators or hard-to-fill CG occupational specialties.
15. The contractor shall ensure the MRA addresses specific, scenario-based, factors that affect personnel requirements, such as surge requirements, environmental conditions, and expected duration of the employment. These factors are capability-related and directly affect the ability of the System commander to sustain operations.
16. The contractor shall ensure the MRA identifies the personnel capable of managing, supporting, maintaining, operating, and repairing the System in the planned operational and maintenance environments with provided training.

E. The contractor shall ensure the MRA is a comprehensive analysis which documents.

1. System MRA process
2. MRA assumptions
3. MRA data
4. Shore support MRA data to include, but not limited
   (a) Shore maintenance support at the organizational, intermediate and depot levels as appropriate to the System for all associated hardware and software.
   (b) Supply support
   (c) Direct tactical support
   (d) Product line management
   (e) Training support
   (f) Personnel support
   (g) CG billet changes to all affected activities in CG PAL format

F. The contractor shall revise the MRA throughout the Acquisition Activity during the three phases of Analyze/Select Phase, Capability Developments & Demonstration, and Production & Deployment

DATA ITEM DESCRIPTION (continued)

TITLE	Manpower Requirements Analysis (MRA)	DID NUMBER	MAP-001

G. The contractor shall deliver and update the MRA with Acquisition Activity MSs and as otherwise specified in the Integrated Master Schedule.

H. The contractor shall modify the System through the complete support infrastructure manpower requirements during the Acquisition Activity.

I. The contractor shall ensure the MRA supports the CG Resource Proposal processes and the Future Year Homeland Security Process (FYHSP) development schedule.

J. The contractor shall base the MRA on the CG Resource Proposal System acquisition plan for the System/System.

K. The contractor may indicate changes to the MRA by referencing past reports rather than by duplicating an entire set of data, information, or plans

Training and Training Support (General Description)

1. Training and training support consists of the policy, processes, procedures, techniques, devices and equipment used to train civilian and military personnel to acquire, operate and support a System. This includes:

   a. individual and crew training

   b. new equipment training

   c. initial; formal

   d. OJT

   e. sustainment proficiency training

   Training and training support includes the processes, procedures, curricula, techniques, training devices, simulators, and other equipment necessary to train civilian and active duty/reserve duty personnel to operate and support/maintain the defense System. This includes individual and crew training (both initial training and follow-on training); new equipment training; and initial, formal, and OJT. In addition to the defense System, logistics support planning normally includes acquisition, installation, operation, and support of training equipment/devices. Acquisition logistics efforts should strive to minimize the training and training support required to effectively operate and support the system.

2. Though the greatest amount of training is accomplished just prior to the fielding of a System, in most Projects, a large number of individuals must also be trained during System development to support the System test and evaluation Project.

3. Computer-aided instruction offers considerable economy and great promise. Self-paced instruction is also proving to be an efficient learning tool and is gaining greater acceptance among the CG's every day. Both types of instruction, however, usually require IT devices, consisting of both hardware and software, which must be supported. Simulators and trainers that simulate the operational System have been used in the past and are increasing in sophistication, effectiveness, and affordability. The more modern of these devices include both hardware and software. Embedded training (trainers that utilize the operational hardware loaded with a training Project in order to function as a training device) is another approach offering great cost-effectiveness for the future. Operator and maintenance training for software-intensive Systems must be provided in a timely manner to support planned introduction rates of these Systems.

4. This element defines qualitative and quantitative requirements for the training of operating and support personnel throughout the life cycle of the System. It includes requirements for:

   a. Competencies management

   b. Factory training

   c. Instructor and key personnel training

   d. New equipment training team

   e. Resident training

   f. Sustainment training

g. User training

h. HAZMAT disposal and safe procedures training

i. Embedded training devices, features, and components are designed and built into a specific System to provide training or assistance in the use of the System

5. The design, development, delivery, installation, and logistics support of required embedded training features, mockups, simulators, and training aids are also included.

Training and Training Equipment (TTE)

A. General Overview

Purpose. This section describes the requirements for analyzing, designing and developing, implementing and evaluating PS&T Systems to support CG acquisitions IAW the CG Training System Standard Operating Procedures (SOP). PS&T requirements shall be analytically and systematically determined to ensure that only validated performance requirements are supported. It integrates training concepts and strategies and elements of logistics support to most effectively and efficiently support desired personnel performance levels required to operate, maintain, and support Systems and Systems. It includes the "tools" used to provide learning experiences such as computer-based interactive courseware, simulators, and actual equipment (including embedded training capabilities on actual equipment) and IETMs. This System includes shore support personnel who support the system once delivered.

B. Background

1. All PS&T requirements shall be based on validated performance requirements provided by Sponsor, Program Manager, or other Technical Authorities (Commandants CG-4, and CG-6). PS&T requirements shall be analytically and systematically determine performance support and training requirements to ensure that only validated performance requirements are supported. After appropriate support requirements are identified, it is imperative that equal rigor be applied to the analysis of potential solutions as to how this support shall be designed, developed, implemented and its effectiveness continuously evaluated.
2. In order to ensure the efficiency of these performance support Systems, it is important to remember that not all performance requirements will require the development of formal performance support or training. Analysts shall limit their scrutiny to the consideration of those knowledge, skills, aptitude and abilities (KSAA) that learners can reasonably expect to not already posses or those KSAA that are best acquired in other, existing locations in the Service i.e., Basic Training or "A" School prior to assignment.
3. In order to remain relevant, PS&T development shall be closely coordinated with the natural maturation of operations and maintenance requirements, as well as, specifically linked to analyses conducted by other HSI elements including HFE and MAP. This is a critical step to ensure potential lifecycle cost tradeoffs between feedback, learning transfer, organizational design/policies, personnel selection, job/work design, incentives and performance support Systems are appropriately considered.
4. In order to ensure validity and continued applicability of performance support and training Systems, vertical alignment and performance requirement validation shall be assured prior to and appropriately throughout the support requirements determination process. Likewise, continued alignment between sponsor performance expectations (usually outlined in mission needs, concept of operations, etc.) and support philosophies (usually outlined in maintenance philosophies, maintenance engineering analyses, etc.) shall be demonstrated by the contractor.
5. All recommendations for PS&T solutions shall be supported by systemic and systematic analyses that have been documented by the contractor and validated/approved by the

Government. A key component of these analyses is the Front End Analysis (FEA) which is a formal procedure for determining the most effective/efficient support systems. The detailed description of the FEA process in the SOP is designed to ensure the process is auditable, verifiable, traceable and repeatable.

C. Definitions and Terms

1. Performance-based Training. That training which imparts the appropriate skills and knowledge required to accomplish a task given specific conditions and standards. Performance-based training evaluates the learners' ability to show (perform) what they have been taught or trained. These evaluations include, but are not limited to pre/post tests, hands-on performance, and knowledge checks conducted periodically injected throughout the training. A key characteristic of performance- based training is that the learning environment closely replicates the performance environment and is never conducted in a traditional classroom via lecture or PowerPoint presentations.

2. Familiarization and Indoctrination. A learning solution that imparts KSAA to learners for equipment or Systems with which it can be shown that they cannot reasonably be expected to possess the required KSAA already. In these programs, it is not unusual to impart a reasonable amount of "knowledge" and familiarization of the Systems to the learner using frequent references to operations and maintenance manuals, technical support documentation, design drawings, pictures of System and components, etc. Familiarization and indoctrination is usually used for initial crews when performance based training or access for opportunities to practice are not practical. Familiarization and indoctrination programs shall always be followed by hands-on (or counterpart) programs that allow users to interact with the same (desired) or like Systems in the operational environment and allows the learners to gain an understanding of how the Systems/equipment interface with other Systems/equipment on the System.

3. Over the Shoulder (OTS). A learning solution that incorporates mentoring and coaching techniques where an accomplished performer or SME guides the learner through the operations or maintenance of a System in the actual performance environment. In this case, the instructor shall demonstrate step-by-step the operation of the System. The learner will repeat the steps with the instructor providing feedback immediately. Example: an instructor gets underway on a surface System and "rides along" with the RADAR operators on the bridge and in the combat information center.

4. Embedded Performance Support. A job aid tool that provides information or otherwise guide performers in the performance environment. Usually refers to electronic Systems such as machinery control and monitoring Systems that provide specific guidance to stimulate required responses from performers in the performance environment. For example, an alarm monitoring System that clearly depicts the source of an alarm, the meaning of the alarm and the users expected response IAW approved casualty response procedures.

5. Job Aids and Electronic Performance Support Systems (EPSS). Job aids are tools that assist and guide performers to perform IAW approved operations or maintenance procedures in the performance environment. These can range in complexity from a warning placard on a piece of equipment that outlines the "Three steps required to secure

power…" to an EPSS such as a hand held device that uses complex graphics to show the performer the three steps required to secure power.

6. Embedded Training Systems. Tools that provide learners opportunities to simulate and practice responses to prescribed operational procedures and emergency response procedures. These Systems are considered embedded because they are embedded in the actual System onboard the System, e.g., in the engineering control spaces of the cutter or on the sensor platform of the aircraft. These are training Systems, however, in that they allow the learner to manipulate and demonstrate learned procedures without affecting the actual, live Systems.

7. Electronic Learning Systems. Much different than embedded performance support tools and job aids, E-Learning Systems are electronic learning interventions that use electronic interfaces to transfer information and/or describe desired performance to a learner in a learning environment e.g., a computer-based learning module delivered to off-cycle vessel crews on a computer terminal in a training room ashore.

D. References

1. U.S. Coast Guard Philosophy on Training, Education, and Development, COMDTINST 1500.23 (series)
2. Training Evaluation Policy, COMDTINST 1550.23 (series)
3. Development and Management of Interactive Courseware (ICW) for Coast Guard Training, COMDTINST 1554.1 (series)
4. Class 'C' School Funding Process, COMDTINST 7302.2 (series)
5. Cutter Training and Qualification Manual, COMDTINST M3502.4 (series)
6. Introduction to the Coast Guard Training System Standard Operating Procedures (SOP), USCG (CG-132) SOP Vol I,
7. SOP Vol II, Analysis, USCG (CG-132)
8. SOP Vol III, Evaluation, USCG (CG-132)
9. SOP Vol IV, Job Aids, USCG (CG-132)
10. SOP Vol V, Curriculum Outline, USCG (CG-132)
11. SOP Vol VI, E-Learning, USCG (CG-132)
12. SOP Vol VII, Non- Instructional Interventions, USCG (CG-132)

F. Roles and Responsibilities

1. Performance Support and Training Needs Assessment. The contractor shall prepare and deliver a PS&T Needs Assessment IAW CDRL TTE-001. This plan shall document all System operators and maintainer jobs, identify those that will require analysis, the method to be used for each analysis, and the schedule and resources required for the analyses in order to determine performance and training support requirements, IAW the CG SOP. The plan shall provide an assessment of the availability and maturity of operational and maintenance (including shore support for afloat Systems) concept of

operations, maintenance philosophy/plans or other information that provides sufficient detail about the expected performer, performance expectations and the performance environment. The contractor shall consider all System components and embarked Systems such as sensor platforms for aircrafts, boats and aircraft embarked on surface Systems and their associated shoreside/airstation support crews.

2. Front End Analyses. The contractor shall conduct an FEA as described in the SOP, for operators and maintainers (including shore support for afloat Systems) for those jobs that are new, unfamiliar to the expected learners, or sufficiently different such that the learners will not possess the required knowledge or skills. The determination that an FEA is required shall be based on a reasonable expectation the KSAAs of the learner population differ greatly from those that will be required to operate or maintain the System IAW performance requirements. FEA Final Reports shall be prepared and submitted for Government review and approval IAW CDRL TTE-002.

   The format and content shall be IAW the SOP.

   The following interim deliverables shall be submitted for government review and approval prior to proceeding to the next step of the FEA.

   The Contractor shall divide the System FEA review process into three distinct RP's as defined by CDRL TTE-002. They are:

   RP-1 – Review of SME/AP List, prior to advancing to Phase 5.

   RP-2 – Review of Train/Job Aid/No Train Decision (per each task), prior to advancing to Phase 9.

   RP-3 – Review and acceptance of FEA recommendations

   The government will have 5-working days to review and comment on each Interim Deliverable. Subsequent work would not begin until all interim Deliverable issues/concerns are resolved.

   The analysts shall conduct a formal out brief to the Government that includes verbal and visual presentation of the final report, addresses any concerns or questions, participate in technical discussion regarding the Plan of Action and Milestones (POAM)/way forward.

   Each FEA final report shall be submitted, reviewed and accepted by the Government before it can be included in the CDRL TTE-003.

3. Performance Support and Training System Plan. The contractor shall prepare and deliver to the government a PS&T System Plan IAW CDRL TTE-003. This plan shall provide the results and recommendations of all analyses and FEAs conducted as a result of the PS&T Analysis Plan/Needs Assessment. This Plan shall clearly identify at least 3 possible solutions for each recommendation and the appropriate justification/explanation for each recommended solution. Each possible solution shall include a cost benefit analysis that considers all costs including training aids and staffing, FAC. Although the contractor will analyze Systems individually, the interaction between each System and other Systems shall be considered and described in the PS&T System Plan. The plan shall include and clearly identify those Systems that are for initial as well as sustainment support. The Plan shall include the following:

a. Methodology. Describe assumptions, source of all information, comments on the maturity of support documentation.

b. Overview of System, Systems and Recommended Performance Support System. Describe the results of high-level performance and learner analyses including an overview of Systems, how they are intended to be employed relative to existing Service norms, overall sense of the complexity of Systems, description of the major events and costs of the recommended performance support System (as concluded by System analyses and FEAs), and prioritization of individual performance support components. The contractor shall demonstrate to the Government's satisfaction that the recommended performance support System will effectively and efficiently enable USCG performers to perform as desired and enable mission success.

c. Support for Initial Crews. Describe (in terms of duration, size, costs, scheduling, content, etc.) and provide analytical justification for the following at a minimum:

(1) Resident training requirements.

(2) Unit-level performance support and training programs.

(3) Indoctrination and familiarization (these programs shall be considered for electronic delivery so as to allow initial crews to repeat the program and otherwise interact with the Systems (electronically) during their preparation for assuming the job being analyzed. This is particularly useful for new crewmembers who may be assigned just prior to System delivery.

(4) Indoctrination and familiarization (hands on).

d. Support Systems in the Performance Environment. Describe (in terms of impact, costs, content, fidelity, intent, etc.) and provide analytical justification for the following support Systems, if justified:

(1) Embedded Performance Support. (These Systems shall be considered for supporting operations and maintenance of machinery control Systems, bridge navigation and control Systems and sensor/combat Systems.)

(2) Watch Qualification Systems and other forms of Formal OJT Programs, mentoring and coaching programs (These programs shall be considered (at a minimum) for those positions on similar USCG fielded Systems or Systems.

(3) Job Aids and EPSS.

(4) Over the Shoulder Support Systems (length, duration, Systems covered).

e. Embedded Training Systems. Describe (in terms of impact, costs, content, fidelity, intent, etc.) and provide analytical consideration of embedded training Systems (at a minimum) in the following Systems:

(1) Aircraft sensor Systems.

(2) Vessel sensor and combat Systems.

(3) Shore based sensor Systems.

(4) Vessel engineering Systems.

(5) Vessel control and navigation Systems.

f. Resident Training. Describe (in terms of duration, costs, scheduling, content, etc.) and provide analytical justification for all resident training requirements. Resident training for initial crews shall be clearly delineated from resident training recommendations for sustainment crews. The following steps of the instructional design process shall be completed, documented, and used to support recommendation for each resident training solution. (at a minimum):

(1) Instructional Analysis.

(2) Learner Analysis.

(3) Context Analysis of Performance Setting.

(4) Development of Performance Objectives.

(5) Development of Assessment Instruments (Pre and Post).

(6) Development of Instructional Strategy.

(7) Instructional Materials and Technical Training Aids and Equipment.

(8) Formative and Summative Evaluation.

g. Technical Training Equipment (TTE). Appropriate emphasis shall be placed on the early identification and justification for TTE (i.e., simulators, engine mockups, table top computer emulators, etc.) that will require significant resources and FAC. The early identification of these requirements is necessary to ensure that they are in place for initial training delivery. Additionally, the contractor shall include all support requirements to adequately support TTE such as technical support documentation, parts and logistics supply, maintenance philosophy, configuration management for hardware and software and staffing.

h. Safety. The contractor shall establish procedures to assure the safety of all participants during training that may involve hazardous operations. Safety procedures shall include relevant notices, cautions, notes, and warnings extracted from preliminary publications, handbooks, or other sources of information pertinent to the operation and maintenance of the equipment. All safety information shall be covered in detail in the appropriate lesson plan, IAW USCG (CG-132) SOP Vol. VI.

i. Training Requirements List. A consolidated list of recommended training requirements sort-able by billet or System that lists the System, job title, billet position number, clearance required for the billet, course number, course title, duration, recommendations as to whether the training should be completed prior to reporting aboard, source and course manager point of contact. The contractor shall analyze and document the cumulative amount of training recommended to be completed prior to reporting aboard and consider the impact on this proposed "Pipeline" training relative to the current assignment policies and procedures of the USCG.

j. Performance Support System Evaluation. The contractor shall describe (in terms of duration, size, costs, scheduling, content, etc.) and provide analytical justification for a comprehensive System to continuously evaluate the effectiveness and efficiency of

all performance support System interventions. The contractor will be expected to implement, analyze, and deliver with improvement recommendations the evaluation for the initial delivery of each component of the System. The System shall be designed to take advantage of all in-place Systems, software, capabilities and policies to enable the Government to implement the evaluation for future deliveries.

4. Performance Support and Training Progress Reports. The contractor shall make recommendations for improving the initial training program, including deficiencies in instructional strategies. The Government may make changes at any time during the process. If all interventions are reasonably effective and efficient, the contractor shall report the completion of each delivery NLT ten (10) days post course completion, and no earlier than every thirty (30) days. This data shall be submitted via a PS&T Progress Report IAW CDRL TTE-004. The contractor shall present quantitative, verifiable evidence in this Progress Report showing the degree to which the initial course training objectives were met, and results of the pre and post learner performance measures. The Training Progress Report shall include completed External Course Evaluations and completed Internal Course Evaluations.

   Particular attention shall be given to the evaluation results following the first implementation of each component. Despite the fact that the contractor shall conduct formative evaluations throughout the design and development process, the execution of the evaluation plan will likely produce new insight into the effectiveness and efficiency of the learning intervention and shall be used to recommend changes to the next delivery. The contractor shall make a direct recommendation regarding each intervention (including each resident training course and each performance objective of familiarization and indoctrination programs) as to whether the component should remain as is, be deleted outright, or remain with modifications for future deliveries. Justification shall be provided for each recommendation including details about proposed modifications.

5. Instructor Qualification. If any intervention (usually familiarization and indoctrination) leads to the contractor's selection of an instructor, mentor, or coach, the contractor shall be responsible for ensuring that person is technically competent and proficient to do so. This requires competence to not only operate and/or maintain the System IAW Service requirements but also that they are proficient in the delivery of performance-based training in the USCG. Each instructor shall possess an American Society for Training and Development (ASTD) Certified Professional in Learning and Performance (CPLP), Technical Trainer certification (or equivalent). The contractor shall submit to the Government a list of proposed instructors, their resumes and professional certification (equivalent) IAW CDRL TTE-005.

6. Training Schedule. The contractor shall develop a Training Schedule of contractor delivered training to be implemented during the pre-commissioning period and transition into the operational phase for the areas of operations, maintenance, and support for the System. The training schedule shall include all job tasks related to System operation, maintenance (Organizational-level), trouble shooting, and repair. The training schedule shall include a high –level System delivery schedule. The Training Schedule shall be incorporated into the Integrated Master Schedule.

Listings of Applicable CDRLs and DIDs for this Section

CDRL#	Title	Sub-Title	DID No.
TTE-001	Technical Report Studies	Performance Support & Training Needs Assessment	DI-MISC-80508B
TTE-002	Technical Report Studies	Front End Analysis Final Report	DI-MISC-80508B
TTE-003	Technical Report Studies	Performance Support & Training System Plan	DI-MISC-80508B
TTE-004	Technical Report Studies	Performance Support & Training Progress Report	DI-MISC-80508B
TTE-005	Personnel Resumes Certification Data Report	Instructor Qualification Documentation	DI-MGMT-81597 DI-MISC-80678

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-TTE-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report-Study/Services
3. Subtitle (If Applicable).	Performance Support & Training Needs Assessment Report
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1B3
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12B
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

This plan documents high level review of all SYSTEM Systems and components, and identifies those which are appropriate for analyses and the level method of analysis to be used. This Plan documents the recommended schedule for completion and resource requirements. If resources are not adequate within the existing contract, this report shall outline those specific analyses that should, therefore, be conducted by the government.

BLK 04. Replace paragraph 3 with the following.

Format. The Analysis Plan shall include the following separate sections to include.

a. Title Page. Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.

b. Table of Contents

c. Executive Summary. This section summarize key recommendations and conclusions reached in the analysis

d. Introduction. This session shall include the objectives and scope as well as, an overview of the presented analysis, assumptions, source of all information, data and methodologies employed. This documentation shall also document limitations of this analysis regardless of cause (e.g., resource constraints, government direction, contractor expertise, availability of data sources or lack of required documentation.

e. Terminology. This section shall cover key acronym definitions that will be used in the body of the Plan.

f. Systems and Components. This section shall include a list and description of all SYSTEM components and Systems that were considered. If appropriate, Systems/components are not considered, these should be listed with justification.

g. Support FAC and Activities. This section shall address the non-organic SYSTEM analyses requirements (if appropriate) required to operate, maintain, direct, manage, and support the SYSTEM.

h. Conclusion & Recommendations This section shall articulate all recommended analyses wit appropriate justification and recommended way ahead.

i. Appendices. This section shall include a complete list of all acronyms called out in the document, complete System/component list, source data such as manning requirements analysis data, maintenance engineering analyses data, Personnel Allowance List.

BLK08. Government review, approval and acceptance of this CDRL is required prior to conducting analyses or developing the PS&T Plan. Allow 30 days for Government review and approval

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-TTE-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report-Study/Services
3. Subtitle (If Applicable).	Front End Analysis Final Report
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12B
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. The format and content shall be IAW SOP for the CG's Training System (CG-132)
BLK08. Government review and approval for technical content, completeness, format and clarity. Allow 90 days for Government review and approval.

The contractor shall divide the SYSTEM FEA process into three RPs.

The following interim deliverables shall be submitted for government review and approval prior to proceeding to the next step of the FEA.
The delivery stages for developments using the requirements process for the FEA methodology is specified below and in CG Training System (TRAYSYS) SOP.

Deliverable Packages.
Review Point 1 (RP-1).

Phase 1 - Extant Data List
Phase 2- SME/AP List
Phase 3 - Major Accomplishments

Review Point 2 (RP-2)

Phase 4 - Task List
Phase 5 - Summary Worksheets #4 (per each task)
Phase 6 - Train/Job Aid/No Train Decision (per each task)
Phase 7 - Environmental Factors on Performance
Review Point 3 (RP-3)
Phase 8 - CBAP Assumptions
Phase 9 - CBA Results
Phase 10 - Final Recommendations
BLK12. Analysis documentation delivered shall initially document the baseline. Subsequent update analysis shall be performed and document changes incorporated into the approved baseline. Subsequent baseline documentation delivery is required within 30 days of Government approval. Allow 90 days for Government review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-TTE-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report-Study/Services
3. Subtitle (If Applicable).	Performance Support & Training System Plan
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1B3
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12B
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

Block 3; modify paragraph to read. The format and content shall be IAW SOP for the Coast Guard's TRAYSYS (CG-132), VOL II and SOW paragraph. E.3.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-TTE-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Technical Report-Study/Services
3. Subtitle (If Applicable).	Performance Support & Training Progress Report
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1B3
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12B
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	MONTHLY
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

The following data, at a minimum, is included.

a. Overall summary of intervention, its intended audience, intended outcomes, delivery strategy, comment on its relative importance within overall performance support & training System plan, etc.

b. Description of the learning environment and evaluation of its accuracy of

replicating the operational environment.

c. Date/time of delivery.

d. List Instructors (and other logistics support personnel involved).

e. List Learners and their command and explanation of why they were there (if not obvious to the reader).

f. Summary of content, topics covered, list learning objectives.

g. Time required to set up, present, break down, and otherwise support this intervention.

h. Time required by learners including logistics/admin/travel (as applicable).

i. Pre intervention performance data that clearly measures each learner's ability to perform each learning objective prior to the intervention.

j. Post intervention performance data that clearly measures each learner's ability to perform each learning objective following the intervention.

k. Analysis of the pre and post performance data, how it might have been effected by the learning environment and/or the selection of learners, list and explanation of notable observations, etc.

l. Conclusions and recommendations that can logically be drawn from the analysis of the pre and post intervention performance data. All recommendations are adequately supported and clearly articulate what step should be taken next and why. Recommendations are provided for each learning objective as to whether the data and analysis are sufficient to leave it as is, delete it or modify it. If it should be modified, then this section provides recommendation as to how it should be modified. This section also recommends changes to instructional strategy, learning environment, etc. that would make the intervention more efficient or effective including how and why.

Block 12. The contractor shall report the completion of each delivery NLT10 days post course completion, NTE every 30 days.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-TTE-005
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	
3. Subtitle (If Applicable).	Instructor Qualification Documentation
4. Authority.	DI-MGMT-81597 Personnel Resumes DI-MISC-80678 –Certification Data Report
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1B3
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

Block 4. Modify DI-MISC-80678 Certification Data Report, paragraph 10.2.2

The list shall include the following information.
Last name, first name and social security number.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.
BLK10. Inspection and approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

Human Factors Engineering (General Description)

1. Human factors requirements, objectives, and thresholds should provide utilization of personnel through the accommodation of the cognitive, physical, and sensory characteristics that directly enhance or constrain System performance.
2. Cognitive requirements address the human's capability to evaluate and process information. Requirements are typically stated in terms of response times and are typically established to avoid excessive cognitive workload. Operations that entail a high number of complex tasks in a short time period can result in cognitive overload and safety hazards. The Capability development Document should specify whether there are human-in-the-loop requirements. This could include requirements for "human in control", "manual override," or "completely autonomous operations."
3. Physical requirements are typically stated as anthropometric (measurements of the human body), strength, and weight factors. Physical requirements are often tied too human performance, safety, and occupational concerns. To ensure the average user can operate, maintain, and support the System, requirements should be stated in terms of the user population. For instance, when the user requires a weapon that is "one-man portable," weight thresholds and objectives should be based on strength limitations of the user population and other related factors (e.g., the weight of other gear and equipment and the operational environment). For example, it may be appropriate to require that "the crew station physically accommodate a female/male population, defined by the 5th through the 95th percentile anthropometric female/male CG member, for accomplishment of the full range of mission functions."
4. Sensory requirements are typically stated as visual, olfactory (smell), or hearing factors. The CDD should identify operational considerations that affect sensory processes. For example, Systems may need to operate in noisy environments where weapons are being fired or an overcast moonless night with no auxiliary illumination.

Human Factors Engineering (HFE)

A. General Overview.

1. Purpose. This section specifies the requirements the Contractor shall fulfill to ensure human factors engineering considerations are fully incorporated into the System's design.
2. Scope. The HFE design for the project will cover all Systems being acquired.

B. Background. The USCG requires contractors to identify factors relating to HSI and its seven elements manpower, personnel (workforce management), training, safety (including environmental and System safety), HFE, survivability and habitability. These requirements include:

1. Describing the intended Systems engineering approach to managing and implementing human factors engineering including the integration of HFE practitioners into the design approach and product teams, the proposed methodologies for each phase of the design, areas of focus with regard to human performance within the design, the processes for developing recommendations and reporting on the status of HFE integration within the [SYSTEM] design, and the identification of key HFE personnel and their credentials.
2. Describing, in general terms, the physical (habitability) requirements for personnel (including working, eating, living and sleeping areas, and mixed gender considerations, where appropriate).
3. Describing any unique personnel or safety requirements such as medical or personal care requirements arising from extended deployment conditions, System redundancy for safety purposes, installed safety-specific capabilities, or post-mishap analysis capability.
4. Describing any unique human factors or human engineering requirements, such as human-machine interface or ergonomic layout requirements.
5. Describing any environmental considerations identified in the environmental impact analysis.

C. Definitions & Terms.

1. Maintainability. Maintainability refers to the ease of maintenance. Ease of maintenance includes physical access with required tools, ease of removal and replacement of parts, visual access if required.
2. Best Practices. A technique or methodology that, through experience and research, has proven to lead reliably to a desired result.

D. References.

1. Department of the Navy Ship Manpower Document/Squadron Manpower Document Development and Review Procedures
2. U.S. Coast Guard Regulations, COMDTINST.M5000.3 (series)
3. Coast Guard Staffing Standards Manual, COMDTINST M5312.11 (series)

4. Coast Guard Enlisted Performance Qualifications Manual, COMDTINST M1414.8 (series)
5. Coast Guard Cutter Training and Qualifications Manual, COMDTINST M3502.4 (series)
6. U. S. Coast Guard Competency Management System Manual, COMDTINST 5300.2 (series)
7. MIL-STD-142
8. Standard Practice for Human Engineering Design for Marine Systems, Equipment and Facilities, ASTM F1166
9. Standard Practice for Human Engineering Program Requirements for Ships and Marine Systems, Equipment and Facilities, ASTM F1337
10. Standard Specifications for Wrought Titanium-6 Aluminum-4Vanadium Alloy for Surgical Implant Applications (UNS R56400), ASTM F1472
11. ABS Guide for Crew Habitability on Ships
12. Shipboard Habitability Program, OPNAVINST 9640.1A
13. Human Engineering Program Process and Procedures. MIL-HDBK-46855A
14. Human Engineering Design Guidelines, MIL-HDBK-759
15. Human Engineering Design Criteria for Military Systems, Equipment, and Facilities, MIL-STD-1472

E. Roles & Responsibilities. HFE Program Plan. The Contractor shall develop a HFE Program Plan IAW CDRL HFE-001. The HFE Program Plan shall document the Contractors' provisions for the following considerations:

1. Workplaces. The Systems design shall provide operational and maintenance workplaces, equipment, controls, and displays IAW MIL-STD-142, ASTM F1166, the ABS Guide for Crew Habitability on Ships, and OPNAVINST 9640.1A.
2. Durability. The Contractor shall design the System to provide Systems and equipment sufficiently durable to operate and maintain under the conditions for which it was designed or procured and reliable, thereby maximizing the availability to the users.
3. Reliability. The Contractor shall design the System to reflect appropriate function allocations to equipment or personnel to achieve reliable System performance with the needed sensitivity, precision, time, and safety at minimum cost and with the minimum level skills required to maintain and operate the System. The IEEE defines reliability as, "The ability of a System or component to perform its required functions under stated conditions for a specified period of time."
4. Simplicity. The Contractor shall design the System for simplicity. The System or equipment design shall be consistent with the desired human-machine System functions, and compatible with the expected maintenance and operational concepts.
5. Training Requirements. The Contractor shall design the System to minimize training requirements. Systems and equipment shall be designed/selected using personnel and training requirements as a discriminator within the limits of time, cost, and performance trade-offs.

6. Operating Environment. The Contractor shall design the Systems and equipment for maintenance, operation, and repair in the planned operational and maintenance environment with minimal training with evidence of avoiding new training requirements during equipment development/selection.
7. Uniformity. The Contractor shall design the Systems and equipment to be consistent, appearing, behaving, and responding the same throughout the System's life cycle. The Systems design shall have uniform controls, displays, marking, coding, labeling, and arrangement for the common functions of all equipment.
8. User-centered Perspective. The Contractor shall design the System to reflect a user-centered perspective that involves focusing on the needs and requirements of the end user throughout the design, acquisition, or development process. The Contractor will design the Systems and equipment to provide the functionality to meet specific user requirements.
9. User Capabilities. The Contractor shall design the Systems, equipment, and FAC to conform to the capabilities and limitations of the users to operate and maintain it in its operational environment and not exceed user capabilities.
10. Trade Studies. The Contractor shall conduct OEM trade study analysis of Systems, equipment sets, etc., to develop human performance data for areas considered important based on critical task analysis. The Contractor shall also use the OEM trade study analysis human performance data to minimize training requirements.
11. Work Procedures. The Contractor shall design Systems and equipment to foster effective procedures, work patterns, and personnel safety and health and minimize factors that degrade human performance that may be in terms of reducing critical tasks or time to complete tasks based on like Systems.
12. Human Characteristics. The Contractor shall design the Systems and equipment, at minimum, for personnel from the 5th through the 95th percentile levels of the human physical characteristics in order to represent the user population.
13. Common Equipment. The Contractor shall use Systems common and class standard equipment, such as electronics, engines, weapon Systems, hardware/software. The Contractor shall use other common equipment whenever possible to reduce training costs and time, increase workforce availability and OJT, increase operational readiness/effectiveness, and reduce parts inventories. The government will use comparisons to legacy Systems in determining reductions and increases.
14. Communications. The Contractor shall design the System to provide the means for required physical, visual, and auditory communication links among personnel, and between personnel and their equipment, under both normal and emergency situations IAW MIL-STD-1472.
15. Movements and Activities. The System shall provide space for personnel, their equipment, and free volume for the movements and activities they are required to perform during operation and maintenance tasks under both normal and emergency conditions IAW MIL-STD-1472.

16. Maintainability. The Contractor shall design the Systems to ensure that Systems are easy to maintain. The Contractor shall design Systems and equipment so that they can be maintained in the least amount of time, at the lowest cost, and with a minimum effort and expenditure of support resources assessed during drawing reviews for access and verified during T&E activities. Systems and equipment shall be designed to require only common hand tools for maintenance unless specialized tools provide a significant advantage over common hand tools or where required by security considerations. The IEEE defines maintainability as, "The ease with which a software System or component can be modified to correct faults, improve performance, or other attributes, or adapt to a changed environment.
17. Controls, Displays, Alarms. The Contractor shall design controls, displays, alarms and the integration therein IAW best industry practices. The [SYSTEM] shall provide for context sensitive alerts in the mode (visual, auditory, tactical) consistent with the conditions upon which it will be displayed as specified in best industry practices. The [SYSTEM] shall provide mechanisms to level operator workload and to ensure tasking can be completed without overload or under load on any individual watch stander. The [SYSTEM] shall utilize uniform control, display, marking, coding, labeling, and layout designs for common functions of all subsystems as well as common display formats, symbology, operating procedures, and interaction modes.
18. Error-tolerant Design. The Contractor shall design the Systems to provide features to prevent and mitigate the effects of human error.
19. Work Station Design. The Contractor shall design [System] workstation controls, displays and alarms, human-computer interfaces, workspaces and consoles IAW ASTM F1166.
20. Labeling. The Contractor shall develop configurations, size and location of labeling IAW this ILS Spec and ASTM F1166.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
HFE-001	Human Engineering Program Plan		DI-HFAC-81742

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-HFE-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Human Engineering Program Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-HFAC-81742
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	See Block 16
8. Approval Code.	See Block 16
9. Distribution Statement Required.	
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1
16. Remarks and Tailoring for Specific Contracts. BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.	

System Safety (General Description)

System Safety consist of those System design characteristics that serve to minimize the potential for mishaps causing death or injury to operators and maintainers or threaten the survival and/or operation of the System. Prevalent issues include factors that threaten the safe operation and/or survival of the platform; walking and working surfaces including work at heights; pressure extremes; and control of hazardous energy releases such as mechanical, electrical, fluids under pressure, ionizing or non-ionizing radiation (often referred to as “lock-out/tag-out”), fire, and explosions. Occupational health factors are those System design features that serve to minimize the risk of injury, acute or chronic illness, or disability; and/or reduce job performance of personnel who operate, maintain, or support the System. Prevalent issues include noise, chemical safety, atmospheric hazards (including those associated with confined space entry and oxygen deficiency), vibration, ionizing and non-ionizing radiation, and human factors issues that can create chronic disease and discomfort such as repetitive motion diseases. Many occupational health problems, particularly noise and chemical management, overlap with environmental impacts. Human factors stressors that create risk of chronic disease and discomfort overlap with occupational health considerations.

SYSTEM SAFETY PROGRAM (SYS)

A. General Overview

1. Purpose. This section specifies the performance requirements the contractor shall fulfill to ensure SYS program considerations are fully incorporated by the contractor into the System's design.

2. Scope. The SYS program design for the project will cover all Systems the USCG is acquiring.

B. Background

1. The USCG requires contractors to identify factors relating to safety considerations. These considerations include.

   a. Safety, consistent with mission requirements, designed by the contractor into the System in a timely, cost effective manner.

   b. Historical safety data, including lessons learned from other Systems, are considered and used.

   c. Minimal or no risk incurred in accepting and using new technology, materials or designs, and new production, test and operational techniques without approval of the Government. Changes to design, configuration, production or mission requirements, including any resulting System modifications and upgrades, retrofits, insertions of new technologies or materials, or use of new production, test or production techniques, should be accomplished in a manner that maintains a risk level acceptable to the Government.

   d. Inclusion of the appropriate safety features during the applicable phases of the System life cycle.

   e. Consideration given early in the life cycle to safety and ease of disposal (including explosive ordnance disposal), and demilitarization of any HAZMAT associated with the System. The contractor should take actions to minimize the use of HAZMAT and, therefore, minimize the risks and life cycle costs associated with their use. The design should be made to ease recycling at the end of the item's life cycle.

   f Hazards associated with each System identified, assessed, tracked, and monitored by the contractor. The contractor should either eliminate or control associated risks to a level acceptable to the Government. Actions taken to eliminate or minimize risk to a level acceptable to the Government should be identified and archived for tracking and lessons learned purposes.

2. Hazards Order of Precedence. The order of precedence for developing solutions to identified hazards shall be as follows:

   a. Design to eliminate or control hazards. If an identified hazard cannot be eliminated, hazards shall be controlled through design.

b. Provide safety devices. Hazards that the Contractor cannot eliminate or control through design shall be controlled using safety features. The contractor shall schedule periodic functional checks of safety features.

c. Provide warning devices. When neither design nor safety features eliminate or control an identified hazard, devices shall be used to detect the condition and to produce an adequate warning to alert personnel of the hazard. The contractor shall design warning signals to minimize the probability of incorrect personnel reaction to the signals.

d. Provide training. Where it is impossible to eliminate or adequately control a hazard through design, safety features, or warning devices, the contractor shall develop procedures and training to control the hazard.

C. Definitions & Terms

1. System Safety. SYS covers the design features and operating characteristics of a System that serve to minimize the potential for human or machine errors or failures that cause injurious situations. Safety considerations should be applied in System acquisition to minimize the potential for injury of personnel and mission failure.

2. Closed Loop Hazard Tracking System. An apparatus comprises an input component for entering risk hazard indexes relating to potential hazards in a System, a processor programmed to compare the risk hazard indexes with user defined risk criteria to provide an indication of a level of risk for the potential hazards, and an output component for supplying reports generated by the processor. A method for identifying and tracking hazards that is performed using the apparatus is also provided.

D. References

1. System Safety, MIL-STD-882D

2. Marking Materials & Markers, Adhesive, Elastomeric, Pigmented, Hazardous Material. Symbols, MIL-M-43719/4 NOT 3

3. Navy Weapon System Safety Program, NAVSEAINST 8020.6D

E. Roles & Responsibilities

1. System Safety Program Plan. The contractor shall implement a SSPP. The contractor shall plan, implement, and maintain the program IAW System Safety, MIL-STD-882D. The contractor shall develop and deliver a SSPP, IAW CDRL SYS-001 that documents the SSP. The SSP shall ensure the efficient and effective achievement of System safety objectives. General elements of this plan shall include a safety management System, organizational support, compliance, System specification safety requirements, and metrics to measure success.

As part of the SSPP, the contractor shall identify the safety design criteria derived from all applicable information including review standards, specifications, regulations, design handbooks, safety design checklists, and other sources of design guidance, for pertinent safety design requirements applicable to the System, and this criteria shall be the basis for developing System specification safety requirements. These requirements shall be

included in the SSPP. The contractor shall expand the criteria and requirements for inclusion in all associated follow-on specifications.

As part of the SSP, the contractor shall identify safety personnel, their qualifications, and organizational structure that the contractor will use for the implementation. While specific organizational and personnel assignments are at the option of the contractor, the actual assignments shall be such that the Government program manager has ready access to the associated safety issues and can make appropriate, informed, and timely decisions regarding individual safety issues.

2. System Safety Hazard Analysis (SSHA) Report. The contractor shall conduct a SSHA to identify hazards associated with the System, System equipment, Systems and interfaces per the SSPP and document the analysis in a SSHA Report IAW CDRL SYS-002.

3. System Safety Program Progress Report (SSPPR). The contractor shall make recommendations for improving the System safety program during the reporting period and the projected work for the next reporting period IAW CDRL SYS-003.

4. Engineering Change Proposal System Safety Report. The contractor shall evaluate each ECP for impacts on SYS. The contractor shall follow the engineering change and configuration control process IAW the CM section of this document. The results of this review shall be incorporated in a report IAW CDRL SYS-004.

5. Waiver or Deviation System Safety Report. The contractor shall evaluate each request for waiver/deviation for impacts on SYS. The results of this review shall be incorporated in a report IAW CDRL SYS-005.

6. Safety Assessment Report. The contractor shall evaluate the safety risks being assumed prior to test or operations of the System. The results of this review shall be incorporated in a report IAW CDRL SYS-006.

7. Safety Studies Plan. The contractor shall describe the activities used to conduct the safety studies to achieve the safety requirements set forth in the specifications IAW CDRL SYS-007.

8. Safety Studies Report (SSR). The contractor shall conduct a Safety Studies Report of all weapon Systems IAW NAVSEAINST 8020.6D. The contractor shall document the Weapons System Safety Review in a report and deliver the report to the Government as per CDRL SYS-008. The Government will perform physical audits as required before delivery of the System to ensure weapons System safety features are incorporated during construction. The contractor's safety analysts shall function within the design team and interface with weapons manufacturers to ensure that safety concerns are adequately resolved during the System design.

9. Radiation Hazard Control Procedures. The contractor shall document the technical information for defining RF Power density and x-ray characteristics for electronic Systems, to achieve the safety requirements set forth in the specifications IAW CDRL SYS-009.

10. Explosive Ordnance Disposal Data (EODD). The contractor shall document the data impacting munition acquisitions when explosive, pyrotechnic items or other HAZMAT

are inherent in the System. The results shall be documented in the specifications IAW CDRL SYS-010.

11. Explosive Hazard Classification Data. The contractor shall document the technical information for assigning hazard classifications used to establish the procedures for the storage and transportation of the System, to achieve the safety requirements set forth in the specifications IAW CDRL SYS-011.

12. Mishap Risk Assessment Report (MRAR). The contractor shall conduct a comprehensive evaluation of all mishap risk assumed during the processing and operation of the System throughout its lifecycle. The contractor shall document the Mishap Risk in a report and deliver the report to the Government as per CDRL SYS-012.

13. Ammunition Data Card. The contractor shall document the essential data pertaining to the initial history of a lot of ammunition and explosive material, in order to provide traceability of explosive items. The contractor shall document the ammunition data card and deliver the card to the Government as per CDRL SYS-013.

14. Safety Decisions Lessons Learned. The contractor shall document and submit to the Government significant safety decisions as "lessons learned" or as proposed changes to applicable design handbooks and specifications, IAW CDRL SYS-014.

15 The Hazard Mitigation Plan. The contractor shall develop a Hazard Mitigation Plan for all identified hazards, to reduce the probability of a hazardous occurrence to an acceptable level of risk, within constraints of mission requirements. The Hazard Mitigation Plan shall be developed and delivered IAW CDRL SYS-015.

The Hazard Mitigation Plan shall document the contractor's consideration of the following general System safety design requirements:

a. Identified hazards shall be eliminated or associated risks shall be reduced through design, including material selection or substitution. When potentially HAZMAT must be used, the materials that pose the least risk throughout the life cycle of the System shall be selected.

b. Hazardous substances, components, and operations shall be isolated from other activities, areas, personnel, and incompatible materials.

c. Equipment shall be located so that access during operations, servicing, maintenance, repair, or adjustment minimizes personnel exposure to hazards (e.g., hazardous chemicals, high voltage, electromagnetic radiation, cutting edges, or sharp points).

d. Risk resulting from excessive environmental conditions (e.g., temperature, pressure, noise, toxicity, acceleration and vibration) shall be minimized.

e. Risk resulting from human error in System operation and support shall be minimized as part of the design effort.

f. In the case of risk from hazards which cannot be eliminated, alternatives which will minimize such risk shall be considered. (e.g., interlocks, redundancy, fail safe design, System protection, fire suppression, and other protective measures, such as clothing, equipment, devices and procedures.)

g. Power sources, controls, and critical components of redundant subsystems shall be protected by physical separation or shielding, or by other suitable methods mutually agreeable to the contractor and the Government.

h. When alternate design approaches cannot eliminate the hazard, safety and warning devices and warning and cautionary notes shall be provided in assembly, operations, maintenance and repair instructions, and distinctive markings shall be provided on hazardous components, equipment, and FAC to ensure personnel and equipment protection. These shall be standardized IAW Marking Materials & Markers, Adhesive, Elastomeric, Pigmented, Hazardous Material Symbols, MIL-M-43719/4 NOT 3, and best commercial practice. Where no such common practice exists, the contractor shall propose the method or methods to be used to the Government for review and approval. The Government shall be provided copies of all warnings, cautions and distinctive markings proposed for review and comment.

i. The severity of injury or damage to equipment or the environment as a result of a mishap shall be minimized.

j. Software controlled or monitored functions shall minimize initiation of hazardous events or mishaps. Software shall include sanity checks, integrity monitors, and other features to verify the validity of control outputs.

k. Design criteria shall not include inadequate or overly restrictive requirements regarding safety. Where there is appropriate supporting information, recommend new safety criteria as needed.

16. Closed Loop Hazard Tracking System. The contractor shall develop and maintain a Closed Loop Hazard Tracking System, database which shall maintain records of all identified hazards IAW chart below. The contractor’s hazard tracking and risk resolution shall ensure a closed loop process of identifying and controlling risks. The government shall have the right to review the data, and have viewing rights into the database at the government's discretion. The following is a list that contains the minimum Hazards data elements:

Hazard Data Elements
Safety Action Record (SAR) – used for tracking hazard records

TYPE	DESCRIPTION
Reference Number	This is a specific number assigned to a SAR
Date	The date in which the SAR has been initiated
Status	The status of the SAR is indicated as open, monitor, or closed
Title	A specific appropriate short title of the SAR is indicated.
Description	The description defines the specific hazardous event under study and its worst case outcome. (The System safety related concern.)
Causes/Contributors	The contributory events singly or in combination that can create the event under study. Specific failures, malfunctions, anomalies, errors are indicated.
Risk (severity and likelihood)	The risk associated with the event is indicated. Initial risk (the risk prior to mitigation) is indicated. The residual risk (the worst case risks after the controls are implemented) is also indicated.
Suggested/Possible Mitigations/Controls	The design and/or administrative controls, precautions, and recommendations, to reduce risk are indicated. An objective is to design out the risks.
Evaluation	The appropriate activities and entities involved in the evaluation of the specific event are indicated.
Implemented Mitigations/Controls	The design and/or administrative controls, precautions, and recommendations that have been verified within the design are indicated.
Verification and validation	The verification and validation to assure that System safety is adequately demonstrated are indicated. Risk controls (mitigation) must be formally verified as being implemented. Safety verification is accomplished by the following methods. inspection, analysis, demonstration and test. Validation is the determination as to the adequacy of the control.
Narrative History	Provide a chronological living history of all of the actions taken relative to the SAR.
References	Appropriate references associated with the specific SAR are indicated Analysis, Configuration Items, Software Units, Procedures, Tests, and Documents.
Originator(s)	The person(s) originating the SAR are listed.
Concurrence	Appropriate concurrence is required to status a SAR as closed (or monitor). IPT/ Program Management concurrence is required for residual risk acceptance. Other concurrence rationale is also documented, such as IPT (or USCG entity) concurrence.

Listings of Applicable CDRLS and DIDs for this Section

CDRL #	Title	Sub-Title	DID No.
SYS-001	System Safety Program Plan		DI-SAFT-81626
SYS-002	System Safety Hazard Analysis Report		DI-SAFT-80101B
SYS-003	System Safety Program Progress Report		DI-SAFT-80105B
SYS-004	Engineering Change Proposals System Safety Report (ECPSSR)		DI-SAFT-80103B
SYS-005	Waiver or Deviation System Safety Report (WDSSR)		DI-SAFT-80104B
SYS-006	Safety Assessment Report (SAR)		DI-SAFT-80102B
SYS-007	Safety Studies Plan (SSP)		DI-SAFT-81066
SYS-008	Safety Studies Report (SSR)		DI-SAFT-81065
SYS-090	Radiation Hazard Control Procedures (RHCP)		DI-SAFT-80184A
SYS-010	Explosive Ordnance Disposal Data		DI-SAFT-80931A
SYS-011	Explosive Hazard Classification Data		DI-SAFT-81299B
SYS-012	Mishap Risk Assessment Report (MRAR)		DI-SAFT-81300A
SYS-013	Ammunition Data Card (ADC)		DI-MISC-80043A
SYS-014	Safety Decisions Lessons Learned.		DI-MISC-80508A
SYS-015	Hazard Mitigation Plan		DI-MISC-80508A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	System Safety Program Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-81626
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See BLK16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	System Safety Hazard Analysis Report
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80101B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See BLK16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	System Safety Program Progress Report
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80105B
5. Contract Reference.	See SOW Paragraph X.X.X.X.
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	
10. Frequency.	See Block 16
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contract.

BLK08. Government Review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designated by them.
BLK11. Initially at System Development and as required by the USCG thereafter.
BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor safety activities and to monitor progress of contractor SYS efforts.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Engineering Change Proposal System Safety report (ECPSSR)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80103B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Y Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Initially at System Development, or as required by the USCG thereafter.
BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor safety activities and to monitor progress of contractor SYS efforts.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-005
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Waiver or Deviation System Safety Report (WDSSR)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80104B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	See Block 16
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Initially at System Development and as required by the USCG thereafter.
BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor safety activities and to monitor progress of contractor SYS efforts.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-006
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Safety Assessment Report (SAR)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80102B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

BLK11. Prior to test or operation of the System and at contract completion.

BLK12&13. First submission shall be 90 days prior to test or operation of the System and 90 days prior to contract completion.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-007
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Safety Studies Plan (SSP)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-81066
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Prior to test or operation of the system
BLK12&13. First submission shall be 90 days prior to test or operation of System.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-008
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Safety Studies Report (SSR)
3. Subtitle (If Applicable).	Weapons System Safety Review
4. Authority.	DI-SAFT-81065
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify the DID as Follows:

Replace paragraph 2 with.

(a) Title Page – Identifies the report by providing contract number, project name or purchase description title, task number and reporting period.

(b) Table of Contents

(c) Section 1 – includes the following:

(1) Introduction

(2) List of weapons and their safety considerations

(3) Mitigation for each Hazards Associated with each Weapon

(4) Other pertinent data as per NAVSEAINST 8020.6D

BLK08. Allow 60 days for Government review and approval

BLK12&13. First submission shall be 90 days prior to completion of the design phase of the life cycle with revisions as needed.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-009
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Radiation Hazard Control Procedures (RHCP)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80184A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Prior to test or operation of the System.
BLK12&13. First submission shall be 90 days prior to test or operation of the System.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-010
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Explosive Ordnance Disposal Data (EODD)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80931B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

BLK11. At commencement of ARP ADE 1. (Need validated) with revisions as needed through the SYE life cycle.

BLK12&13. First submission shall be 90 days prior to commencement of ARP ADE 1. (Need validated) with revisions as needed through the SYE life cycle.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-011
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Explosive Hazard Classification Data (EHCD)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-81299B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. At commencement Requirements Definition Phase and revisions as needed through the Systems engineering life cycle.
BLK12&13. First submission shall be 90 days prior to commencement of Requirements Definition Phase with revisions as needed through the SYE life cycle.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-012
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Mishap Risk Assessment Report (MRAR)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-81300A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. During the processing and operation of the System through the SYE life cycle.
BLK12&13. First submission shall be 90 days prior to commencement of ARP ADE 1. (Need validated) with revisions as needed through the SYE life cycle.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-013
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Ammunition Data Card (ADC)
3. Subtitle (If Applicable).	
4. Authority.	DI-MISC-80043A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Commence documentation in the planning phases and record essential data pertaining to the initial history of each lot of ammunition through its life cycle in use with the System.
BLK12&13. First submission shall be 90 days prior to the planning phases and record essential data pertaining to the initial history of each lot of ammunition through its life cycle in use with the System.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-014
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Safety Decisions Lessons Learned
3. Subtitle (If Applicable).	Technical Report- Study/Services
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK04. Modify the DID as Follows.
Replace paragraph 2 with:
2. Content.
(a) Title Page – Identifies the report by providing contract number, project name or purchase description title, task number and reporting period.
(b) Table of Contents
(c) Section 1 – includes the following.
(1) Introduction
(2) Process or identifying lessons
(3) Lessons Learned
(4) Summary
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. BLK12&13. Report shall be delivered after the delivery of the first System, and an updated report shall be delivered upon project completion.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SYS-015
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Hazard Mitigation Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-MISC-80043A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.
BLK04. Modify the DID as Follows: Replace paragraph 2 with:
2. Content.
(a) Title Page – Identifies the report by providing contract number, project name or purchase description title, task number and reporting period.
(b) Table of Contents
(c) Section 1 – includes the following:
(1) Introduction
(2) Process or Identifying Hazards
(3) Identified Hazards
(4) Planned Mitigation for each Hazard
(5) Possible Future Hazards.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval
BLK12&13. First submission shall be XXX.

Health Hazards (General Description)

Safety and Health Hazard parameters should address all activities inherent to the life cycle of the System., including test activity, operations, support, maintenance, and final demilitarization and disposal. Safety and Health hazard requirements should be stated in measurable terms whenever possible. For example, it may be appropriate to establish thresholds for the maximum level of acoustic noise, vibration, acceleration shock, blast, temperature or humidity, or impact forces, etc., or "safeguards against uncontrolled variability beyond specified safe limits, " where the CDD specifies the "safe limits". Safety and health hazard requirements often stem from human factor issues and are typically based on lessons learned from comparable or predecessor Systems. For example, both physical dimensions and weight are critical safety requirements for the accommodation of pilots in ejection seats design. Safety and health hazard thresholds are often justified in terms of human performance requirements, because, for example, extreme temperature and humidity can degrade job performance and lead to frequent or critical errors. Another methodology for specifying safety and health requirements is to specify the allowable level or residual risk as defined in MIL-STD-882D for example, "There shall be no high or serious residual risks present in the System."

Health Hazards (HH)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure an effective Health Hazard Assessment Report (HHAR) is fully incorporated into the System's acquisition.
2. Scope. The HHAR for the project will cover all Systems the USCG is acquiring.

B. Background

During the early stages of the acquisition process, sufficient information may not always be available to develop a complete HHAR. As additional information becomes available the initial analyses are refined and updated to identify health hazards, assess the risks, and determine how to mitigate the risks, formally accept the residual risks, and monitor the effectiveness of the mitigation measures. The health hazard risk information is documented in the PESHE. The nine HH issues and definitions below are typically addressed in a HH analysis.

C. Definitions & Terms

1. Acoustic Energy. The potential energy that transmits through the air and interacts with the body to cause hearing loss or damage to internal organs.
2. Biological Substances. The exposure to microorganisms, their toxins and enzyme.
3. Chemical Substances. The hazards form excessive airborne concentrations of toxic materials contracted through inhalation ingestion, and skin or eye contact.
4. Oxygen Deficiency. The displacement of atmospheric oxygen from enclosed spaces or at high altitudes.
5. Radiation Energy. Ionizing. The radiation causing ionization when interfacing with living or inanimate matter. Non-ionizing. The emissions from the electromagnetic spectrum with insufficient energy to produce ionizing of molecules.
6. Shock. The mechanical impulse or impact on an individual from the acceleration or deceleration of a medium.
7. Temperature Extremes and Humidity. The human health effects associated with high or low temperatures, sometimes exacerbated by the use of a materiel System.
8. Trauma Physical. The impact to the eyes or body surface by a sharp or blunt object.
9. Musculoskeleta. The effects to the System while lifting heavy objects.
10. Vibration. The contact of a mechanically oscillating surface with the human body.

D. Roles & Responsibilities.

Health Hazard Assessment Report. The contractor shall develop, establish, and maintain a health hazard assessment to include cost avoidance figures to support trade-off analysis. The report will address the nine health hazard issues IAW CDRL HH- 001

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
HH-001	Health Hazard Assessment Report		DI-SAFT-80106B

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-HH-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Health Hazard Assessment Report (HHAR)
3. Subtitle (If Applicable).	
4. Authority.	DI-SAFT-80106B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
BLK11. Initially at System Development, or as appropriate for design modifications.
BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of contractor safety activities and to monitor progress of contractor System safety efforts.

Personnel Survivability and Habitability (General Description)

During early stages of the acquisition process, sufficient information may not always be available to develop a complete list of Personnel Survivability issues. An initial report is prepared listing those identified issues and findings and conclusions. Classified data and findings are to be appropriately handled according to USCG guidelines. Personnel Survivability issues typically are divided into the following components:

1. Reduce Fratricide. Fratricide is the unforeseen and unintentional death or injury of "friendly" personnel resulting from friendly forces employment of weapons and munitions. To avoid these types of survivability issues, personnel Systems and weapons should include anti-fratricide Systems, such as Identification of Friend or Foe, and Situational Awareness Systems.
2. Reduce Detectability. Reduce detectability considers a number of issues to minimize signatures and reduce the ranges of detection of friendly personnel and equipment by confounding visual, acoustic, electromagnetic, infrared/thermal, and radar signatures and methods that may be utilized by enemy equipment and personnel. Methods of reducing detectability could include camouflage, low-observable technology, smoke, countermeasures, signature distortion, training and/or doctrine.
3. Reduce Probability of Attack. Analyst should seek to reduce the probability of attack by avoiding appearing as a high value target and by actively preventing or deterring attack by warning sensors and use of active countermeasures.
4. Minimize Damage if Attacked. Analysts should minimize damage if attacked by:
   a. designing the System to protect the operators and crewmembers from enemy attacks,
   b. improve tactics in the field so survivability is increased,
   c. design the System to protect the crew from on-board hazards in the event of an attack (e.g., fuel, munitions, etc) and
   d. design the System to minimize the risk to supporting personnel if the System is attacked. SMEs in weapons of mass destruction, ballistics, electronic warfare, directed energy, laser hardening, medical treatment, physiology, human factors and information operations can add additional issues.
5. Minimize Injury. Analysts should seek to minimize:
   a. enemy weapon caused injuries.
   b. the System's ability to prevent further injury to the CG member after being attacked.
   c. the System's ability to support treatment and evacuation of injured personnel. Also address evacuation capability and personal equipment needs (e.g., uniform straps to pull a crew member through a small evacuation port).
6. Minimize Physical and Mental Fatigue. Analysts should seek to minimize injuries that can be directly traced to physical or mental fatigue. These types of injuries can be traced to complex or repetitive tasks, physically taxing operations, sleep deprivation, or high stress environment.

7. Survive Extreme Environments. This component is to address issues that will arise once the CG member evacuates or is forced from a damaged System such as an aircraft or watercraft and must immediately survive extreme conditions encountered in the sea or air until rescued or an improved situation on land is reached. Dependent upon requirements, this may also include some extreme environmental conditions found on land, but generally this component is for sea and air where the need is immediate for special consideration to maintain an individual's life.

   The program manager should summarize plans for personnel survivability in the support strategy and address personnel survivability risks and plans for risk mitigation. The program manager should address crew survivability issues during the Test and Evaluation. Also, address special equipment or gear needed to sustain crew operations in the operational environment

Habitability

Habitability is one of the several important factors included in the overall consideration of unit mission readiness. The program manager shall work with habitability representatives to establish requirements for the physical environment (e.g., adequate light, space, ventilation, and sanitation and temperature and noise control) and if appropriate, requirements for personnel services (e.g., religious, medical and mess) and living conditions (e.g., berthing and personal hygiene) if the habitability factors have a direct impact on meeting or sustaining performance requirements sustaining mission effectiveness or that have such an adverse impact on quality of life or morale that recruitment or retention rates could be degraded. Examples include requirements for heating and air-conditioning, noise filters, lavatories, showers, dry cleaning and laundry.

Personnel Survivability (SSv)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure an effective survivability and habitability management program is fully incorporated into the System's acquisition.

2. Scope. The Survivability Cost Effectiveness Tradeoff Studies Report for the project will cover all Systems the USCG is acquiring.

B. Background

1. SSv factors consist of those System designs featured that reduce the risk of fratricide, detection and probability of being attacked; and that enable the crew to withstand man-made hostiles environments without aborting the mission or suffering acute chronic illness, disability or death. Applicable crew survivability parameters may include requirements to eliminate significant risks of fratricide or detectability, or to be survivable in a nuclear, biological, and chemical (NBC) environment. It may be appropriate to require that the System permit performance of mission – essential operations, communications, maintenance, re-supply and decontamination tasks by suitably clothed, trained and acclimatized personnel for the survival periods.

2. The consideration of survivability should also include System requirements to ensure the integrity of the crew compartment and rapid egress when the System is damaged or destroyed. It may be appropriate to require that the System provide for adequate emergency Systems for contingency management, escape, survival and rescue.

C. Definitions & Terms

1. Personnel Survivability. Are factors consisting of design features that reduce the risk of fratricide, detection, and the probability of being attacked; and that enable the crew to withstand man-made hostile environments without aborting the mission or suffering acute chronic illness, disability or death.

2. Habitability. Issues could impact personnel morale, safety health, or comfort or degrade personnel performance, unit readiness, or result in recruitment or retention.

D. References

1. Shipboard Habitability Program, OPNAV Instruction 9640.1A

2. NAVSEA Shipboard Habitability Design Criteria Manual 9T9640-AB-DDT_010/HAB

E. Roles & Responsibilities

1. Survivability Cost Effectiveness Tradeoff Studies Report. The contractor shall develop, establish, and maintain a survivability program throughout the performance period for the [SYSTEM] contract. The contractor shall document the support cost and operational effectiveness IAW CDRL SSv- 001.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
SSv-001	Survivability Cost Effectiveness Tradeoff Studies Report		DI-RELI-81500

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SSv-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Survivability Cost Effectiveness Tradeoff Studies Report
3. Subtitle (If Applicable).	
4. Authority.	DI-RELI-81500
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-1
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

BLK11. Initially at System Development, or as appropriate for design modifications.

BLK12&13. First submission shall be 90 days prior to System Development and periodically as needed to perform review of operational effectiveness and suitability of the System design concept.

Environment, Safety, and Occupational Health (General Description)

The Environment, Safety, and Occupational Health section specifies the multi-discipline area, which takes into account pollution prevention, environmental compliance, conservation, restoration, munitions response, safety, occupational health, environmental health, explosives safety, fire and emergency services, pest management, environmental technology, and international activities. It is an important factor in sustaining readiness by cost-effectively maintaining all installations and Systems through promotion of safety, protection of human health, and protection and restoration of the environment. These CDRLs will be used when developing SOWs for an Environment, Safety, and Occupational Health program by the contractor.

ENVIRONMENTAL, SAFETY AND OCCUPATIONAL HEALTH (ESOH)

A. Overview

1. Purpose. This section specifies the performance requirements the contractor shall fulfill to ensure ESOH program considerations are fully incorporated by the contract into the System's design.

2. Scope. ESOH design applies to all CG acquisition programs defined to include new and existing Systems, sub-Systems, equipment, and software programs, as well as any associated research and development, construction, modification, modernization, overhaul, repair and disposal.

B. Background

1. ESOH is a multi-discipline area, which takes into account pollution prevention, environmental compliance, conservation, restoration, munitions response, safety, occupational health, environmental health, explosives safety, fire and emergency services, pest management, environmental technology, and international activities. It is an important factor in sustaining the readiness of the USCG by cost-effectively maintaining all installations and Systems through promotion of safety, protection of human health, and protection and restoration of the environment.

2. The USCG requires contractors to identify factors relating to ESOH considerations. These considerations include:

   a. ESOH, consistent with mission requirements, designed by the contractor into the System in a timely, cost effective manner.

   b. Hazards associated with each System shall be identified, assessed, tracked, and monitored by the contractor. The contractor shall either eliminate or control associated risks to a level acceptable to the Government. Actions taken to eliminate or minimize risk to a level acceptable to the Government, should be identified and archived for tracking and lessons learned purposes.

   c. Historical ESOH data, including lessons learned from other Systems, are considered and used.

   d. Minimal or no risk incurred in accepting and using new technology, materials or designs, and new production, test and operational techniques. Changes to design, configuration, production or mission requirements, including any resulting System modifications and upgrades, retrofits, insertions of new technologies or materials, or use of new production, test or production techniques, shall be accomplished in a manner that maintains a risk level acceptable to the Government. Approval by the Government is required.

   e. Inclusion of the appropriate ESOH features during the applicable phases of the System life cycle.

   f. Consideration given early in the life cycle to safety and ease of disposal (including explosive ordnance disposal), and demilitarization of any HAZMAT associated with the System. The contractor shall take actions to minimize the use of HAZMAT and,

therefore, minimize the risks and life cycle costs associated with their use. The design should be made to ease recycling at the end of the item's life cycle.

C. Definitions & Terms

1. ESOH. A multi-disciplined area, which takes into account pollution prevention, compliance, conservation, restoration, munitions response, safety, occupational and environmental health, explosives safety, fire and emergency services, pest management, environmental technology and international activities. It is an important factor in sustaining the readiness of the CG by cost effectively maintaining all installations and Systems through promotion of safety, protection of human health, and protection and restoration of the environment.

2. ESOH Risk Information. This information includes a description of the risk or hazard, a preliminary risk assessment, mitigation measures necessary to eliminate or reduce risk, a residual risk assessment, a residual risk acceptance document, and mitigation measures of effectiveness.

3. HAZMAT Risk Information. HAZMAT Risk Information includes the locations and quantities of HAZMAT on the System. Where applicable, it also includes energetic qualification information for each energetic material used in the System, reasonably anticipated hazardous byproducts or discharges, and expected quantities of hazardous waste generated during normal use and maintenance, in addition to those anticipated in emergency situations (e.g., exhaust, fibers from composite materials released during accidents, etc.); and special HAZMAT training and handling.

D. References

1. Department of Defense Standard Practice for System Safety, MIL-STD-882
2. Navy System Safety Policy Program, OPNAVINST 5100.24B
3. National Environmental Policy Act (NEPA, 42 U.S.C. 4321-4370d)
4. Environmental Effects Abroad of Major Federal Actions, Executive Order 12114 of January 4, 1979
5. Greening the Government Through Leadership in Environmental Management, Executive Order 13148 of April 21, 2000
6. Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, Executive Order 13101 of September 14, 1998

E. Roles & Responsibilities

1. Hazards Order of Precedence. The order of precedence for developing solutions to identified hazards shall be as follows:

   a. Design to Eliminate or Control Hazards. If an identified hazard cannot be eliminated, hazards shall be controlled through design.

   b. Provide Safety Devices. Hazards that cannot be eliminated or controlled through design shall be controlled using safety features. The contractor shall schedule periodic functional checks of safety features.

c. Provide Warning Devices. When neither design or safety features eliminate nor control an identified hazard, devices shall be used to detect the condition and to produce an adequate warning to alert personnel of the hazard. The contractor shall design warning signals to minimize the probability of incorrect personnel reaction to the signals.

d. Provide Training. Where it is impossible to eliminate or adequately control a hazard through design, safety features, or warning devices, the contractor shall develop procedures and training to control the hazard.

2. ESOH Program. The contractor shall develop and manage an ESOH program that shall mitigate ESOH risks using a risk management process. The contractor shall document the ESOH Program in the PESHE. This risk program shall utilize ESOH risk analysis matrices IAW MIL-STD-882, "Department of Defense Standard Practice for System Safety". The risk matrices shall clearly define probability and severity criteria (either qualitative or quantitative) to categorize ESOH risks. Types of ESOH risks shall include impacts and adverse effects from routine System development, testing, training, operation, sustainment, maintenance, and demilitarization/disposal, mission readiness impacts from System failures or mishaps, including critical software failures, and impacts to program lifecycle cost, schedule, and performance from ESOH compliance requirements. The ESOH Program shall include a description of risk information and HAZMAT risk information. The ESOH Program shall include procedures to allow the government to conduct safety and environmental compliance inspections on the SYSTEM.

3. PESHE. The PESHE Evaluation is a strategy for integrating ESOH considerations into the SYE risk management process using methodologies described in MIL-STD-882. It also contains a schedule for completing the National Environmental Policy Act (NEPA, 42 U.S.C. 4321-4370d) and Executive Order 12114 documentation, the status of ESOH risk management, and the identification, assessment, mitigation, residual risk acceptance, and on-going evaluations of mitigation effectiveness and on NEPA compliance. The contractor will update the PESHE as required to incorporate new initiatives, new technology, and revised or new federal requirements. The contractor shall include measures for compliance with the Going Green initiative. The contractor shall develop a PESHE IAW CDRL ESOH-001.

4. Green Acquisition. The contractor shall consider, as appropriate, a broad range of factors including the elimination of virgin material requirements, the use of bio-based products, the use of recovered materials, the reuse of product, life cycle cost, recyclability, the use of environmentally preferable products, waste prevention (including toxicity reduction or elimination), and ultimate disposal.

5. Class 1 Ozone Depleting Substances. The contractor shall employ no class I Ozone-Depleting Substance (ODS) in the construction or operation of this System, except where mission-critical. The Government must approve any exception in writing. The contractor will document compliance in the PESHE evaluation IAW CDRL ESOH-001.

Listings of Applicable CDRLS and DIDs for this Section.

CDRL #	Title	Sub-Title	DID No.
ESOH-001	Management Plan	Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE)	DI-MGMT-80004A

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-ESOH-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE)
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	N/A
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-443
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. This report shall be developed IAW MIL-STD-882, “Department of Defense Standard Practice for System Safety”.
Modify the DID as follows.
Replace paragraph 3 with.
(1) Introduction
(2) ESOH in the Risk Management Process.
(3) NEPA Completion Schedule.
(4) Executive Order 12114 Completion Schedule.
(5) Status of ESOH Risk Management.
(6) Assessment of Mitigation Compliance.
(7) Assessment of NEPA Compliance.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12 and 13. First submission before System Definition Review. Subsequent submissions when changes incorporate new initiatives, new technology, and revised or new federal requirements.

Facilities (General Description)

1. The Facilities logistics element is composed of a variety of planning activities, all of which are directed toward ensuring that all required permanent operating and support facilities (for instance, training, field and depot maintenance, storage, operational, and testing) are available concurrently with System fielding. Related acquisition activities include:

   a. site surveys.
   b. studies to define types of facilities or required facility improvements.
   c. location selection studies.
   d. space needs analysis.
   e. requirements analysis.
   f. Identification of installed equipment requirements (especially any specific utilities requirements).

2. Facilities include the permanent or temporary real property Systems required to operate and support the System. The facilities analysis includes conducting studies to define necessary facilities or facility improvements and determining locations, space, utilities, environmental, real estate, and equipment needs. Acquisition logistics efforts should strive to minimize or eliminate the facilities required to operate and support the System. Where facilities are demonstrated to be absolutely needed, maximizing the use of existing facilities should be considered.

3. Planning must be comprehensive and include the need for new construction as well as modifications to existing facilities. Facility construction can take from 5 to 7 years from concept formulation to user occupancy. It also includes studies to define and establish impacts on life cycle cost, funding requirements, facility locations and improvements, space requirements, environmental impacts, duration or frequency of use, safety and health standards requirements, and security restrictions. Also included are any utility requirements, for both fixed and mobile facilities, with emphasis on limiting requirements of scarce or unique resources.

FACILITIES (FAC)

A. General Overview

1. Purpose. This section establishes the requirements for end item building, structures, utilities, and land planning, development, and installation of SUE and trainers/operators.
2. Scope. The FAC for the project will cover all Systems being acquired.

B. Background

FAC are the permanent or temporary real property Systems required to support the System, including conducting studies to define FAC or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment. FAC support normally includes buildings, structures, utilities, parameters, and the underlying ground where the end article/item will be housed or serviced.

C. Definitions & Terms

1. Shore Facilities Capital System Management (SFCAM) System. The SFCAM is a System that enables the USCG to determine FAC requirements necessary to accomplish assigned missions through optimum utilization of existing Systems. Shore Facilities Project Development Manual (SFPDM), COMDTINST M11010.14 (series) defines procedures and documentation requirements of this process.
2. Programming and Design. Programming and Design is the process by which engineering solutions for proposed shore FAC projects are developed and designed. This process is documented in the Project Development Submittal (PDS) for OE projects and in the Project Proposal Report (PPR) for AC&I projects.
3. Construction Documents. The construction documents are the written and graphic documentation prepared for communicating the design and administering the project. Drawings document the architectural, structural, mechanical, electrical, civil, landscape, and interior design of the project; drawings will be computer generated and in conformance with the National Building Information Model (NBIM) Standard. Specifications outline the levels of quality and the standards to be met in the construction of a project; specifications will be in conformance with Construction Specification Institute (CSI) Manual of Practice.

D. References

1. Shore Facilities Project Development Manual (SFPDM), COMDTINST M11010.14 (series)
2. The National Environmental Policy Act – Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series)
3. Real Property System Management Manual, COMDTINST M11010.10 (series)
4. Financial Resource Management Manual (FRMM), COMDTINST M7100 (series)
5. National Building Information Model (NBIM) Standard Specifications

6. Construction Specification Institute (CSI) Manual of Practice
7. Scientific And Technical Reports - Elements, Organization, And Design, ANSI Z39.18-1987

E. Roles & Responsibilities

1. The contractor shall prepare and provide to the USCG the FRD for Typical Shore-based Facilities, cutter homeports and trainers IAW CDRL FAC-001. FRD include the Problem Statement (PS), Planning Proposal (PP) or Execution Proposal (EP) or Decision Memo for Shore Infrastructure (DMSI) which are documented in Field Planning for Shore Infrastructure, COMDTINST M11000.17 (series).

   The Contractor shall use SUE Installation Data provided by the USCG for the necessary facility/SUE interface criteria. The contractor shall have the responsibility of coordinating and including in the FRD the requirements of the new support equipment.

   Through coordination with the USCG FAC LEM and the ILSM, the Contractor shall include in the FRD all probable facility requirements for the end item, support equipment, and trainers. If a modified version of an existing end item is planned, only the unique or peculiar items for the new System that impose facility requirements shall be added to the basic document. The FRD is a generic FAC document and is not site specific. It is used as the basis for performing the FAC site surveys and preparing the site evaluation reports. It includes generic installation control drawings for shipboard installations. Control drawings are prepared IAW acceptable commercial standards. The FRD must interface with the SFCAM System to ensure optimum use of naval Systems at shore activities.

2. Data requirements. After building, structures, utilities, and land requirements have been identified, the contractor shall provide the data requirements contained on the LMI Data Products Worksheet IAW CDRL FAC-002.

   This LMI Data Products Worksheet applies to data requirements for additional building, structures, utilities, and land to support end item, SUE, trainers, training SUE, and the logistics support for FAC. The contractor may suggest alternative methods of meeting LMI requirements.

3. The Contractor shall perform site surveys for each shore site, homeport, test & evaluation or other sites as specified by the government as defined in the Acquisition Strategy Plan IAW CDRL FAC-003.

   The Contractor shall perform a site survey at each site planned for activation and prepare a building, structures, utilities, and land site evaluation report for each site. Scheduling of the shore-based site surveys will be coordinated with the USCG building, structures, utilities, and land LEM for each site, who shall determine to what extent contractor participation and the participation of other IPT members is required. The contractor shall perform the shipboard site surveys in conjunction with the USCG IPT facility planners.

Listings of Applicable CDRLS and DID for this Section

CDRL #	Title	Sub-Title	DID No.
FAC-001	Trainer FAC Report	FAC Requirements Document	DI-FACR-80966
FAC-002	FAC Plan	FAC Requirements Document	DI-FACR-80976
FAC-003	Logistics Management Information	Logistics Management Information for FAC	DI-ALSS-81529
FAC-004	Site Survey	Shore site, homeport, test & evaluation, others as specified	DI-MISC-81381

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-FAC-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Trainer FAC Report
3. Subtitle (If Applicable).	Facilities Requirements Document (FRD)
4. Authority.	DI-FACR-80966 Trainer Facilities Report
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-443
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-FAC-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Facilities Plan
3. Subtitle (If Applicable).	Facilities Requirements Document (FRD)
4. Authority.	DI-FACR-80976 Facilities Plan
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-443
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	A
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-FAC-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.	
1. Sequence Number.	
2. Title of Data Item.	Logistics Management Information Data Product(s)
3. Subtitle (If Applicable).	Logistics Management Information for FAC
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-443
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 90 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

The following LMI Data Products Worksheet identifies the approved data products for FAC and logistics support.

DATA PRODUCTS WORKSHEET
End Item Acronym Code
Revision
Task Code
Type of Construction
Unit of Measure
Unit of Measure Price
Real Property Type
Real Property Use
Legal Interest
Status
Historical Status
Reporting Agency
Using Organization
Size
Utilization Value
Condition Index
Mission Dependency
Annual Operating Cost
Main Location
Real Property Unique Identifier
City
State
Country
County
Congressional District
Zip Code
Installation/Sub installation identifier
Restrictions
Dispositions

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-FAC-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Site Survey
3. Subtitle (If Applicable).	
4. Authority.	DI-MISC-81381
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	CG-443
7. DD 250 (Material Inspection & Receiving Report) Required.	IAW DoD Directive 5010.12M
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks and Tailoring for Specific Contracts.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 30 days for Government review and approval.

BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.

Computer Resources Support (General Description)

The Computer Resources Support section specifies the acquisition of the facilities, hardware, software (System software and support software), software development and support tools, documentation, personnel, training or other resources necessary to operate and support embedded computer Systems and software intensive Systems. These CDRLs will be used when developing SOWs for the acquisition of Computer Resources for a System, by the contractor.

COMPUTER RESOURCES SUPPORT (CRS)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure that CRS is fully incorporated into the System's design.
2. Scope. The CRS for the project will cover all Systems being acquired.

B. Background

CRS is the FAC, hardware, software (System software and support software), software development and support tools, documentation, personnel, training or other resources necessary to operate and support embedded computer Systems and software intensive Systems.

C Definitions & Terms

1. Computer Program Documentation. The comprehensive written description of computer software in various formats and levels of detail, that clearly define its content, composition, design, performance, testing, and use.
2. Computer Program End Item Documentation. Computer Program End Item Documentation defines the requirements for documentation to accompany the delivery of software end items.
3. Computer Resources Life-Cycle Management Plan (CRLCMP). The CRLCMP is the overall management plan for CRS for the System.
4. Computer Software Configuration Items. A group of software treated as a single entity by a configuration management System.
5. Concept of Operations Document. The CONOPS document is used to communicate overall quantitative and qualitative System characteristics to the user, buyer, developer, and other organizational elements (i.e., training, facilities, staffing, and maintenance). It is also used to describe the user organization(s), mission(s), and organizational objectives from an integrated Systems point of view.
6. Computer Operation Manual. The COM provides information needed to operate a given computer and its peripheral equipment. This manual focuses on the computer hardware itself, not on a particular computer software configuration item that will run on the computer.
7. Developmental Baseline. The initial set of specifications and other documents approved by the USCG project office, which define the requirements on the software being developed by the contractor. The baseline evolves throughout the software development cycle under the contractor's internal software CM process, and represents the definition of the software at any stage of its development. Upon delivery to, and final acceptance by the USCG, the Developmental Baseline becomes the Product Baseline under control of the USCG.

a. Quality Assurance. A program for the Systematic monitoring and evaluation of the various aspects of a project, service, or facility, to ensure that standards of quality are being met.

b. Open Systems Architecture. A standard that describes the layered hierarchical structure, configuration, or model of a communications or distributed data processing System, that enables System description, design, development, installation, operation, improvement, and maintenance to be performed at a given layer or layers in the hierarchical structure, allows each layer to provide a set of accessible functions that can be controlled and used by the functions in the layer above it, enables each layer to be implemented without affecting the implementation of other layers, and allows the alteration of System performance by the modification of one or more layers without altering the existing equipment procedures and protocols at the remaining layers.

c. Risk Management. Policies, procedures, and practices involved in identification, analysis, assessment, control, avoidance, minimization, or elimination of unacceptable risks.

d. Software. A combination of associated computer programs and computer program data definitions required to enable the computer hardware to perform computational or control functions. Software is categorized as application, support, Systems, and test and maintenance.

e. Software Center Operator Manual. The SCOM provides personnel in a computer center or other centralized or networked software installation information on how to install and operate a software System. The SCOM is developed for software Systems that will be installed in a computer center or other centralized or networked software installation, with users accessing the System via terminals or personal computers, or submitting and receiving inputs and outputs in batch or interactive mode.

f. Software Design Description. The SDD describes the design of a computer software configuration item. It describes the CSCI-wide design decisions, the CSCI architectural design, and the detailed design needed to implement the software.

g. Software Development. The engineering process that results in software, encompassing the span of time from project initiation through delivery and acceptance.

h. Software Development Plan. The SDP describes a developer's plans for conducting a software development effort.

i. Software Developmental Status Report. The SDSR provides the status of software development parameters for a particular computer software CI or hardware CI that incorporates software technology.

j. Software Installation Plan. The SIP documents how the software will be installed into the System.

k. Software Maintenance Plan. The SMP provides overall guidance on how and at what level maintenance will be performed on the software, and on the support requirements for this maintenance.

l. Software Product Specification. The SPS contains or references the executable software, source files, and software support information, including "as built" design information and compilation, build, and modification procedures, for a computer software CI.

m. Software Requirements Specification (SRS). The SRS specifies the requirements for a computer software CI and the methods to be used to ensure that each requirement has been met.

n. Software Security Plan. The Software Security Plan defines how the software will be protected from viruses and illegal and unauthorized access.

o. Software Test Description. The Software Test Description describes the test preparations, test cases, and test procedures to be used to perform qualification testing of a computer software CI or a software System or subsystem.

p. Software Test Plan. The STP describes plans for qualification testing of computer software CIs and software Systems. It describes the software test environment to be used for the testing, identifies the tests to be performed, and provides schedules for test activities.

q. Software Transition Plan. The Software Transition Plan documents how the contractor will transition project software from contractor ownership and support, to Government ownership and support.

r. Software Test Report (STR). The STR is a record of the qualification testing performed on a computer software CI, a software System or subsystem, or other software-related item.

s. Software User Manual. The SUM describes to a hands-on software user how to install and use a CSCI, a group of related CSCIs, or a software System or subsystem. It may also cover a particular aspect of software operation, such as instructions for a particular position or task.

t. Software Version Description. The SVD is a process to number versions of software of software products. A Version Description or Version Description Document (VDD) is the primary configuration control document used to track and control versions of software being released to testing, to implementation, or to the final operational environment. The VDD provides a summary of the features and contents for a specific software build or release, and facilitates product implementation, testing, operations and maintenance. The VDD identifies and describes the version of the CSCIs that comprise the software build or release, including all changes to the CSCIs since the last VDD was issued, as well as installation and operating information unique to the version described. The VDD applies to any release of a product revision, and includes software, hardware, and firmware.

u. System Requirements Specifications (SyRS). The SyRS defines what the System is required to do.

D. References

1. Mission Critical Computer Resources Software Support, MIL-HDBK-347
2. Electronics Manual, COMDTINST 10550.25(series), dated 3 May 2007

3. Systems and Software Engineering - Life Cycle Processes - Risk Management, ISO/IEC 16086 IEEE Std 16085-2006
4. IEEE Guide for Developing System Requirements Specifications, IEEE Std 1233-1998
5. IEEE Guide for Information Technology - System Definition - Concept of Operations (CONOPS), IEEE Std 1362-1998
6. Standard for Information Technology - Software Life Cycle Processes, IEEE/EIA 12207.0-1996
7. IEEE Standard for Software User Documentation, IEEE Std 1063-2001
8. Guidelines for the Application of ISO 9001 to the Development, Supply, Insulation and Maintenance of Computer Software Quality Management and Quality Assurance Standards - Part 3, ISO9000-3
9. IEEE Standards for Software Quality Assurance Plans (SQAP)" IEEE Std 730-2002
10. IEEE Standard for Software Safety Plans, IEEE Std 1228-1994
11. Information and Life Cycle Management Manual, COMDTINST M5212.12 (series)

E. Roles & Responsibilities

1. Computer Resources Support Analysis (CRSA). The Contractor shall conduct a Computer Resources Support Analysis IAW CDRL CRS-001. The CRSA will determine all factors necessary to support a System's computer hardware and software, including training, utilities, security, environment, and data storage. The Contractor will use the results of this analysis to develop the CRLCMP.
2. Computer Software System Document (CSSD). The CSSD fully describes the requirements of a computer software CI. The item is specified in terms of modules, functions of the modules, and sub-functions.
3. Risk Management Program. The contractor shall develop and implement a Risk Management Program IAW IEEE STD 16085-2006, "Systems and Software Engineering - Life Cycle Processes - Risk Management. The contractor shall develop a Risk Management Plan IAW CDRL CRS-002.
4. Open Systems Architecture. When the contractor develops CSCI for an end item, the contractor shall apply open Systems architecture to the greatest extent possible.
5. Concept of Operations Document. The contractor shall develop and deliver a CONOPS document IAW IEEE STD 1362-1998, "IEEE Guide for Information Technology - System Definition - Concept of Operations (ConOps) Document." The contractor shall deliver the CONOPS IAW CDRL CRS-003.
6. System Requirements Specifications. The contractor shall develop and deliver a SyRS IAW IEEE STD 1233-1998, "IEEE Guide for Developing System Requirements Specifications." This document describes the identification, organization, presentation, and modification of System requirements. The contractor shall deliver the SyRS IAW CDRL CRS-004.
7. Software Requirements Specification. The contractor shall develop and deliver an SRS

IAW CDRL CRS-005.

8. Software Product Specification. The contractor shall develop and deliver an SPS IAW CDRL CRS-006.

09. Software Development Plan. The contractor shall develop and provide a SDP IAW CDRL CRS-007.

10. Software Design Description. The contractor shall develop and deliver an SDD IAW CDRL CRS-008.

11. Computer Software System Document. The contractor shall develop and deliver a CSSD IAW CDRL CRS-009.

12. Software Resources Data Reporting. Initial Developer Report and Data Dictionary. These two deliverables are used to obtain the estimated characteristics of a software product and its development process, define each of the data elements within the software resources data report, and describe rules and methods used to perform data measurement or estimation. The contractor shall develop and deliver the Initial Developer Report and Data Dictionary IAW CDRL CRS-010.

13. Software Version Description. The contractor shall include a SVD with each version of developed software, or each computer software CI, IAW CDRL CRS-011.

14. Software Developmental Status Report. The contractor shall develop and deliver the SDSR IAW CDRL CRS-012.

15. Software Test Plan. The contractor shall develop and deliver the STP IAW CDRL CRS-013.

16. Software Test Description. The contractor shall develop and deliver the Software Test Description IAW CDRL CRS-014.

17. Software Test Report. The contractor shall develop and deliver the STR IAW CDRL CRS-015.

18. Computer Software Product. The CSP defines requirements for delivery of software source code and documentation. The contractor shall develop and deliver the CSP IAW CDRL CRS-016.

19. Computer Program End Item Documentation. The contractor shall develop and deliver the Computer Program End Item Documentation IAW CDRL CRS-017.

20. Software Resources Data Reporting; Final Developer Report and Data Dictionary. These two deliverables are used to obtain the actual, as-built, characteristics of a software product and its development process, define each of the data elements within the software resources data report, and describe rules and methods used to perform data measurement. The contractor shall develop and deliver the Final Developer Report and Data Dictionary IAW CDRL CRS-018.

21. Software User Manual. The contractor shall develop and deliver the SUM IAW CDRL CRS-019.

22. Computer Operation Manual. The contractor shall develop and deliver the COM IAW CDRL CRS-020.

23. Software Center Operator Manual. The contractor shall develop and deliver the SCOM IAW CDRL CRS-021.

24. Software Transition Plan. The contractor shall develop a Software Transition Plan IAW CDRL CRS-022.

25. Software Installation Plan. The contractor shall develop a SIP if installation at a user site(s) is necessary, IAW CDRL CRS-023.

26. Computer Resources Working Group. The contractor shall establish and host a CRWG. The contractor shall participate in the CRWG. Its membership shall consist, at a minimum, of both Government and contractor personnel, and shall include those individuals designated by the USCG Project Office, the USCG's LEMs for CRS and SUE, representatives from Commandant (CG-64) and C2CEN, and the contractor's LEMs for CRS and SUE, and appropriate subcontractors designated by the contractor. The CRWG shall meet bimonthly (six times per year) at a minimum, or as mutually agreed upon by the Government and contractor. The contractor will provide minutes of the CRWG IAW CDRL CRS-024.

27. Software Maintenance Plan. The contractor shall develop and deliver the SMP IAW CDRL CRS-025.

28. Software Safety. If the software to be developed is used in a safety-critical System, the contractor shall develop and test this software IAW National Aeronautics and Space Administration (NASA) Software Safety Standard NASA-STD-8719.13B, and as part of the overall Systems Safety effort. The contractor shall conduct a Software Safety Requirements and Analysis IAW CDRL CRS-026. The contractor shall conduct a Software Design and Safety Analysis IAW CDRL CRS-027. The contractor shall conduct a Software Implementation and Safety Analysis IAW CDRL CRS-028. The contractor shall conduct a Software Test and Safety Analysis IAW CDRL CRS-029.

29. Software Security Plan. The contractor shall develop and deliver the Software Security Plan IAW CDRL CRS-030.

30. Software Quality Assurance. The contractor shall develop and utilize a Software Quality Assurance Program. The contractor shall develop a SQAP IAW IEEE STD 730-2002, "IEEE Standard for SQAPs". The contractor shall develop and deliver the SQAP IAW CDRL CRS-031.

31. Records Management. Contractor shall determine if official records are created and/or maintained by the system and scheduled for disposition per the requirements of reference 11 above. All data created for Government use and delivered to, or falling under the legal control of the Government are Federal records and shall be managed per the Federal Records Act and requirements of the National Archives and Records Administration (NARA).

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-001
CONTRACT NUMBER.

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1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Computer Resources Support Analysis (CRSA)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows: Replace paragraph 3 with:
2. Contents.
(a) Title Page - Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.
(b) Table of Contents
(c) Section I - Includes the following.
(1) Introduction
(2) An analysis of all factors necessary to support the System's computer hardware and software, including training, maintenance, utilities, security, environment, safety, and data storage and integrity.
(2) Summary - A brief statement of results obtained from the analytic effort.
(3) Conclusions and their condensed technical substantiation's.
(d) Section II - A complete and detailed description of the analytic results which led to the conclusions stated in Section I above.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The CRSA first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-002
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	Risk Management Plan (RMP)
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04 This plan shall be IAW IEEE Std 16085-2006.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The RMP first submission shall be made prior to the System Definition Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-003
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Concept of Operations Document (CONOPS)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. This document shall be IAW IEEE STD 1362-1998
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The CONOPS first submission shall be made prior to the System Definition Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-004
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Development Plan (SDP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81427A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	See Block 16
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12 and 13. The SDP first submission shall be made prior to the PDR. It shall be resubmitted for re-approval upon every substantial change to the document.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-005
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Design Description (SDD)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81435A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SDD first submission shall be made prior to the Test Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-006
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Computer Software System Document (CSSD)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-80942
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The CSSD first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-007
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Resources Data Reporting; Initial Developer Report and Data Dictionary
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-MGMT-81739
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Software Resources Data Reporting; Initial Developer Report and Data Dictionary first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-008
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Version Description (SVD)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81442A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SVD first submission and subsequent submissions shall be made as each version of software is finalized and/or ready to deliver to the Government.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-009
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Developmental Status Report (SDSR)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-MCCR-80459
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	BI-MO
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SDSR first submission shall be made prior to the PDR, and bimonthly thereafter.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-010
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Test Plan (STP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81438A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The STP first submission shall be made 120 days prior to the Test Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-011
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Test Description (STD)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81439A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The STD first submission shall be made 120 days prior to the Test Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-012
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Test Report (STR)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81440A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The STR first submission shall be made within 30 days of test completion, and shall be a onetime submission with revisions for each test.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-013
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Computer Software Product
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81488
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Computer Software Product first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and the required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-014
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Computer Program End Item Documentation
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-80590B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-16
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Computer Program End Item Documentation first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and the required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-015
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Resources Data Reporting; Final Developer Report and Data Dictionary
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-MGMT-81740
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Software Resources Data Reporting; Final Developer Report and Data Dictionary first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and their required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-016
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software User Manual (SUM)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81443A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Software User Manual first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and the required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-017
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Computer Operation Manual (COM)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81446
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The COM first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and their required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-018
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Center Operator Manual (SCOM)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81444A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SCOM first submission and subsequent submissions shall be made IAW the applicable contract clause for software deliverables and the required delivery dates.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-019
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Transition Plan (STP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81429
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The STP first submission shall be made prior to the Production Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-020
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Software Installation Plan (SIP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-IPSC-81428A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SIP first submission shall be made prior to the CDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-021
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Report, Record of Meeting/Minutes
3. Subtitle (If Applicable).	Computer Resources Working Group (CRWG) Minutes
4. Authority.	DI-ADMN-61505
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. Minutes shall be developed and transmitted by the contractor within 14 days of each meeting adjournment. Copies of the minutes shall go to the USCG Project Office, those individuals the USCG Project Manager deems necessary, and all meeting attendees.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-022
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Maintenance Plan
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace paragraph 3 with.
3. Contents.
(a) Title Page - Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.
(b) Table of Contents
(c) Section I - Includes the following.
(1) Introduction
(2) Description of System software and related hardware.
(3) Explanation of maintenance concept for this software.
(4) Description of maintenance procedures for this software.
(5) Explanation of how this maintenance concept fits into the overall System maintenance concept as developed in the overall Maintenance Planning effort.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The Software Maintenance Plan first submission shall be made prior to the CDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-023
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Safety Requirements and Analysis (SSRA)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace with Section 6.1 of NASA-STD-8719.13B Software Safety Standard.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SSRA first submission shall be made prior to the System Definition Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-024
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Design and Safety Analysis (SDSA)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace with Section 6.2 of NASA-STD-8719.13B Software Safety Standard.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SDSA first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-025
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Implementation and Safety Analysis (SISA)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace with Section 6.3 of NASA-STD-8719.13B Software Safety Standard.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SISA first submission shall be made prior to the Test Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-026
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Test and Safety Analysis (STSA)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16A
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace with Section 6.4 of NASA-STD-8719.13B Software Safety Standard.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The STSA first submission shall be made prior to the Test Readiness Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-027
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Management Plan
3. Subtitle (If Applicable).	Software Security Plan
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.

Replace Section 3 with.

(1) Introduction
(2) Description of System software and related hardware.
(3) Explanation of software security strategy and processes.
(4) Explanation of how software security strategy fits into the overall System computer security strategy.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK 12. The Software Security Plan first submission shall be made prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-CRS-028
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Software Quality Assurance Plan (SQAP)
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office, CG-6
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace report with IEEE Std 730-2002, “IEEE Standard for SQAP”.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SQAP first submission shall be made prior to the PDR, and shall be updated as needed or upon request of the USCG.

Listings of Applicable CDRLS and DID for this Section

DI-MISC-80508B	Technical Report - Study/Services
DI-MGMT-80004A	Management Plan
DI-IPSC-81433A	Software Requirements Specification
DI-IPSC-81441A	Software Product Specification (SPS)
DI-IPSC-81427A	Software Development Plan (SDP)
DI-IPSC-81435A	Software Design Description (SDD)
DI-IPSC-80942	Computer Software System Document (CSSD)
DI-MGMT-81739	Software Resources Data Reporting; Initial Developer Report and Data Dictionary
DI-IPSC-81442A	Software Version Description (SVD)
DI-MCCR-80459	Software Developmental Status Report (SDSR)
DI-IPSC-81438A	Software Test Plan (STP)
DI-IPSC-81439A	Software Test Description (STD)
DI-IPSC-81440A	Software Test Report (STR)
DI-IPSC-81488	Computer Software Product
DI-IPSC-80590B	Computer Program End Item Documentation
DI-MGMT-81740	Software Resources Data Reporting; Final Developer Report and Data Dictionary
DI-IPSC-81443A	Software User Manual (SUM)
DI-IPSC-81446	Computer Operation Manual (COM)
DI-IPSC-81444A	Software Center Operator Manual (SCOM)
DI-IPSC-81429	Software Transition Plan (STP)
DI-IPSC-81428A	Software Installation Plan (SIP)
DI-ADMN-61505	Report, Record of Meeting/Minutes
NASA-STD-8719.13B	Software Safety Standard

IEEE Std 730-2002 IEEE Standard for SQAPs

IEEE Std 16085-2006 Systems and Software Engineering - Life Cycle Processes - Risk Management

IEEE STD 1362-1998 IEEE Guide for Information Technology - System Definition - Concept of Operations (CONOPS) Document

IEEE Std 1233-1998 IEEE Guide for Developing System Requirements Specifications

Support Equipment (General Description)

The Support Equipment section specifies the acquisition of all equipment (mobile or fixed) required to support the operation and maintenance of a System. The four types of Support and Test Equipment are Ground Handling and Maintenance Equipment, Tools, Jigs, and Fixtures, Miniature/Micro Miniature Repair Kits, and Test, Measurement, and Diagnostic Equipment. These CDRLs will be used when developing SOW for the acquisition of Support Equipment by the contractor.

SUPPORT EQUIPMENT (SUE)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure that the contractor provides the equipment, mobile or fixed, required to support the operation and maintenance of the SYSTEM.
2. Scope. The SUE requirements for the project will cover all Systems being acquired.

B. Background

Based on the supportability analysis, the contractor recommends common and peculiar SUE for the SYSTEM. The contractor also recommends SUE that must be developed for the SYSTEM. The contractor's recommendations should be based on SUE commonly used by the USCG, the Department of Defense (DoD), or industry.

C. Definitions & Terms

1. Automatic Test Equipment (ATE) is a generic term for equipment, separate or built-in, that satisfies a test function, diagnostic or condition indicating, and possessing an automatic capability. ATE can be either a part of the SYSTEM, or it can be a part of the support equipment.
2. Common SUE is an SUE type that is designed for a wide range of applications, and usually exists in the normal SUE inventory.
3. Peculiar SUE is a SUE type that is unique and is designated for use with a specific equipment or equipment family.
4. SUE is all equipment, mobile or fixed, required to support the operation and maintenance of a material System. This includes associated multiuse end items, ground handling and maintenance equipment, tools, metrology and calibration equipment, test equipment, and automatic test equipment. It also includes the acquisition of logistics support for the support and test equipment itself.
5. SUE Recommendation Data is the contractor's recommendation for SUE to support the contract end article. A narrative approach is used with engineering data that support the contractor's description of a function requiring support together with a recommended means to satisfy this need. Quantitative methods are also used to provide availability, logistics support, and acquisition-type data regarding the item of SUE being recommended. The total SERD is intended to support overall Systems management action for SUE development, acquisition, and optimum standardization within and among Systems.
6. SUE Installation Data is information required for the installation of SUE in existing or planned shipboard and shore-based facilities. This information includes services, as well as space, mounting, environmental, special facility, and safety requirements relating to SUE installation.

D. References

1. Requirements for the Control of Electromagnetic Interference Characteristics of SubSystems and Equipment, MIL-STD-461
2. Mechanical Vibrations of Shipboard Equipment (Reciprocating Machinery and Propulsion System and Shafting) Types III, IV, and V (Controlled Distribution), MIL-STD-167-2
3. Support Equipment, Aeronautical, Special, General Specification for the Design of, MIL-S-8512
4. Identification Marking for U.S. Military Property, MIL-STD-130
5. DoD Test Method Standard for Environmental Engineering Considerations and Laboratory Tests, MIL-STD-810
6. Performance Specification Logistics Management Information, MIL-PRF-49506
7. Level A Shock Tests. H.I. (High-Impact) Shipboard Machinery, Equipment, and Systems, Requirements for, MIL-S-901
8. Mechanical Vibrations of Shipboard Equipment (Type I - Environmental and Type II - Internally Excited), MIL-STD-167-1
9. Department of Defense Standard Practice for Calibration and Measurement Requirements, MIL-STD-1839
10. Calibration and Measurement Requirements, MIL-HDBK-1839
11. Acquisition of Support Equipment and Associated Integrated Logistics Support, MIL-HDBK-2097
12. USCG Aeronautical Support Equipment Process Guide, CGTO PG-85-00-150

E. Roles & Responsibilities

1. Support Equipment Identification and Recommendation. After the contractor identifies a requirement for SUE based on the End Item SUA, the contractor shall provide the data requirements contained on the LMI Data Products Worksheets hereafter called the SERD. The contractor shall ensure its work efforts and the data provided are traceable to the supportability analyses results. The SERD shall be the principal recommendation and approval medium used for support equipment required to support the end item. The contractor shall prepare each SERD IAW CDRL SUE-001.
2. Supportability Analysis Levels. The contractor shall recommend what type of SUA level is required for support equipment end items in the SERD using the definitions provided below. These definitions shall be tailored to the requirements of the specific project. The contractor shall base decisions on the amount of design freedom allowed, time allotted, work already performed, data availability, relevancy and resource availability as well as procurement considerations for the given System.

   (a) SA-4. For a complex SUE end item that contains repairable components, assemblies, or subassemblies that must be evaluated through SUA to determine the

optimum cost effective support concept. This shall include calibration if applicable. Repair analysis, RCM and FMECA are required for all SA-4 candidates.

(b) SA-3. For a SUE end item which contains repairable components, assemblies, or sub-assemblies that require SUA but not the formal RCM, FMECA, and repair analysis process. Tasks for this type of equipment rely on like and similar equipment for reliability, preventive, and corrective intervals; or best engineering judgment (supplemented by information from existing USCG and DOD guidance). Calibration is included if applicable.

(c) SA-2. For simple repairable equipment, or commercial equipment not in the USCG or DOD inventory. It is for a non-complex SUE end item that contains repairable components, assemblies, or sub-assemblies with maintenance and support requirements that can be determined without a full task or subtask analysis. Preventive and corrective maintenance tasks, including calibration if applicable, shall be determined by best engineering judgment.

(d) SA-1. For equipment that is basically non-repairable but which has inspection, calibration and possibly minor remove and replace actions. Maintenance planning data shall be developed for these items.

(e) NO. SUE item is not repairable

3. The contractor shall document compliance with the following requirements in the SERD as appropriate.

(a) Calibration. All SUE items selected by the contractor shall be calibrated IAW MIL-STD-1839.

(b) Electromagnetic Interference. Equipment that radiates power, either electronic, electrical, or electromechanical, can interfere with the performance characteristics of other equipment. The contractor shall mitigate the effects of electromagnetic interference of SUE to prevent the performance degradation of other Systems, IAW MIL-STD-461, “Requirements for the Control of Electromagnetic Interference Characteristics of SubSystems and Equipment”.

(c) Shipboard Vibrations Requirement. Shipboard SUE must be able to withstand both internally excited vibrations and externally imposed vibrations. The contractor shall mitigate the effects of vibrations on SUE IAW MIL-STD-167-2A “Mechanical Vibrations of Shipboard Equipment (Reciprocating Machinery and Propulsion System and Shafting) Types III, IV, and V (Controlled Distribution).”

(d) Shipboard Interface. Shipboard SUE must interface with ship Systems. The contractor shall make sure that all SUE fully interface with ship Systems IAW MIL-STD-1399 (series), “Interface Standard for Shipboard Systems.

(e) Aircraft Electric Power. Aircraft SUE must interface with aircraft Systems. The contractor shall make sure that all aircraft SUE fully interface with aircraft Systems IAW MIL-STD-704, “Aircraft Electric Power Characteristics.”

(f) Aircraft Support Equipment. Aircraft SUE has special characteristics different from shipboard SUE. The contractor shall design and develop aircraft SUE IAW MIL-S-

8512, "Support Equipment, Aeronautical, Special, General Specification for the Design of."

(g) Engineering Changes and Configuration Control. The contractor shall follow the engineering change and configuration control process IAW the CM section of this document.

(h) Support Equipment Logistics Support. The contractor shall analyze each recommended SUE line item in terms of required support, considering all logistics elements. Logistics support requirements shall be recommended to the government based on the System SUA. The process includes SUA and Maintenance Planning; Contractor Support; Depot Repair and Rework; Technical Manuals; SUS; Training; Facilities; PHS&T; Calibration Measurement Requirements Summary; and Support for SUE.

(i) Supportability Plan Subsection. The contractor shall develop, revise, and provide the SUE subsection of the System supportability plan as required to reflect logistics support requirements that are unique to approved SUE items.

(j) Early Support Equipment Identification Report. The contractor shall develop and deliver an ESEIR. This report lists SUE that has such a long lead time for development, that it cannot follow the normal SUE development and production timeframe. The contractor shall deliver the ESEIR IAW CDRL SUE-002.

(k) SERD Sketches. A SERD sketch is a simple graphic drawing or picture illustrating what the SUE will look like. The contractor shall transmit sketches for all SERD items in best commercial practices format, IAW CDRL SUE-003.

(l) Nomenclature/ID Plates/Type Equipment Codes/SNs. The contractor shall request assignment of nomenclature and approval of identification plate drawings, type equipment codes, and SNs for all SUE items and the end item from the government IAW MIL-STD-130N, "Identification Marking of U.S. Military Property", and CDRL SUE-004.

(m) Test and Evaluation. The contractor shall plan for and conduct test and evaluation of all SUE, including compatibility testing of all pre-existing SUE, and identify these requirements in the SERD. The contractor shall develop a test program plan IAW CDRL SUE-005. The contractor shall develop a test plan for each item to be tested IAW CDRL SUE-006.

(n) Logistics Management Information Data Products List for SUE. The LMI provides information and reports required by the Government to perform acquisition logistics functions. This LMI Data Products List applies to data requirements for end items of SUE, and logistics support for SUE. The contractor shall provide this data. This specification sheet lists SUE related products derived from the LMI process. The contractor shall deliver these products IAW CDRL SUE-007.

(o) SUE Integrated Product Team (SEIPT). The contractor shall establish and host a SEIPT. The contractor shall participate in the IPT. Its membership shall consist of both Government and contractor personnel, and shall include the USCG's LEM for SUE, representatives from Commandant (CG-64) and the USCG Support Activity, and the contractor's LEMs for SUE. The SEIPT shall meet as mutually agreed

upon by the Government and contractor. The contractor shall provide minutes of the meetings IAW CDRL SUE-008.

(p) SUE Guidance Conference. The contractor shall organize and host an SUE Guidance Conference. The goal of this conference shall be to establish the acquisition strategy for SUE. Participants shall include the prime contractor, sub-tier vendors, the USCG Project Office representatives, other Government organizations as required by the USCG, and any other industry organizations as deemed necessary by the contractor. The contractor shall provide minutes of the conference IAW CDRL SUE-009.

(q) SUE Installation Data. The contractor shall prepare and provide SEID for the installation of SUE in existing or planned shipboard and shore-based facilities, IAW CDRL SUE-010.

Listings of Applicable CDRLS and DIDs for this Section.

CDRL #	Title	Sub-Title	DID No.
SUE-001	Technical Report - Study/Services	Support Equipment Recommendation Data	DI-MISC-80508A
SUE-002	Technical Report - Study/Services	Early Support Equipment Identification Report (ESEIR)	DI-MISC-80508A
SUE-003	Technical Report - Study/Services	SERD Sketches	DI-MISC-80508A
SEU-004	Request for SN Assignment for Mark and Mod Nomenclatured Equipment	None	DI-CMAN-81211
SUE-005	Test and Evaluation	None	DI-NDTI-81284
SUE-006	Test Plan	None	DI-NDTI-80566A
SUE-007	Technical Report - Study/Services	Logistics Management Information (LMI) Data Products List for SE	DI-MISC-80508A
SUE-008	Report, Record of Meeting/Minutes	SE Integrated Product Team (SEIPT) Minutes	DI-ADMN-61505
SUE-009	Conference Minutes	Support Equipment Guidance Conference Minutes	DI-ADMN-81250A
SUE-010	Support Equipment Installation Data (SEID)	None	DI-ILSS-80454

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-001
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Support Equipment Recommendation Data (SERD)
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace paragraph 2 with.
2. Content.
(a) Title Page - Identifies the report by providing contract number, project name or purchase description title, task number, and reporting period.
(b) Table of Contents
(c) Section I - Includes the following.
(1) Introduction
(2) PN, NSN, Nomenclature, CAGE Code of the equipment.
(3) Summary - A brief statement of the process used for developing the SERD including SUA.

(4) Envisioned support strategy. (5) Budget and pricing data, including separate price out of required ILS services and data. BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review. BLK 12. SERD submission shall start prior to the PDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-002
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Early Support Equipment Identification Report (ESEIR)
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Modify the DID as follows.
Replace paragraph 3 with.
(1) Introduction
(2) PN, NSN, Nomenclature, CAGE Code of the equipment.
(3) Summary - A brief statement of the process used for developing the ESEIR including SUA.
(4) Envisioned support strategy.
(5) Budget and pricing data, including separate price out of required ILS services and data.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The ESEIR submission shall be made prior to the System Definition Review.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-003
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Support Equipment Recommendation Data (SERD) Sketch
4. Authority.	DI-MISC-80508A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Replace paragraph 3, Section (c)1 with.
(1) Introduction
(2) PM, NSN, Nomenclature, CAGE Code of the equipment if existing.
(3) The SERD sketch.
(4) Rationale. Statement as to why this item is needed and cannot be replaced by an existing item.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SERD Sketch submission shall be made prior to the CDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-004
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Request for SN Assignment for Mark and Mod Nomenclatured Equipment
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-CMAN-81211
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. The contractor shall also follow MIL-STD-130N, Identification Marking of U.S. Military Property.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. Submission shall be done as required.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-005
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Test and Evaluation Program Plan (TEPP)
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-NDTI-81284
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The TEPP submission shall be made prior to the CDR.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-006
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Test Plan
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-NDTI-80566A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. Submission shall be done as required.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-007
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Technical Report - Study/Services
3. Subtitle (If Applicable).	Logistics Management Information (LMI) Data Products List for Support Equipment
4. Authority.	DI-MISC-80508B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASGEN
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK04. Replace paragraph 3, Section (c)1 with.
(1) Introduction
(2) Complete LMI Data Products List as shown in support equipment section 1.14 worksheet.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. Government shall have full access to view this data at all times. Submission shall be made prior to the Test Readiness Review.

	SUPPORT EQUIPMENT SECTION 1.14 WORKSHEET **LMI Data Products List**
0060	Calibration and Measurement Requirement Summary Recommended
0070	Calibration Interval
0080	Calibration Item
0090	Calibration Procedure
0100	Calibration Required
0110	Calibration Time
0140	Commercial and Government Entity Code
0160	Contractor Recommended
0230	Demilitarization Code
0240	Description and Function Of Support Equipment
0250	Design Data Category Code
0270	End Item Acronym Code
0290	Estimated Price
0320	Functional Analysis
0350	Hardware Development Price
0400	Installation Factors or Other Facilities
0420	Integrated Logistics Support Requirements Category Code
0460	Item Category Code
0470	Item Designator Code
0480	Item Name
0580	Maintenance Task Distribution
0680	National Stock Number and Related Data
0740	Overhaul Replacement Rate
0780	Pass Through Price
0800	Preparing Activity
0830	Production Lead Time
0970	Quantity Per Test
1020	Recurring Cost
1030	Reference Number

	SUPPORT EQUIPMENT SECTION 1.14 WORKSHEET **LMI Data Products List**
1160	Scope
1220	Source, Maintenance And Recoverability Code
1240	Special Maintenance Item Code
1300	Support Equipment Dimensions
1310	Support Equipment Explanation
1320	Support Equipment Recommendation Data Number
1330	SE Recommendation Data Revision Remarks
1340	Support Equipment Weight
1410	Type Equipment Code
1500	Unit of Issue Price
1560	Usable on Code
1580	Work Unit Code

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-008
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Report, Record of Meeting/Minutes
3. Subtitle (If Applicable).	Support Equipment Integrated Product Team (SEIPT) Minutes
4. Authority.	DI-ADMN-61505
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 30 days for government review.
BLK 12. Submission shall be done NLT 14 days after meeting adjournment.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-009
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Conference Minutes
3. Subtitle (If Applicable).	Support Equipment Guidance Conference Minutes
4. Authority.	DI-ADMN-81250A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. Submission shall be done NLT 14 days after conference adjournment.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-SUE-010
CONTRACT NUMBER.

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block 4.

1. Sequence Number.	
2. Title of Data Item.	Support Equipment Installation Data
3. Subtitle (If Applicable).	N/A
4. Authority.	DI-ILSS-80454
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	Project Office
7. DD 250 (Material Inspection & Receiving Report) Required.	DD
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ONE/R
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	N/A
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.
BLK 08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK 12. The SEID submission shall be made prior to the Test Readiness Review.

Packaging, Handling, Storage, and Transportation (General Description)

1. Packaging, Handling, Storage, and Transportation includes the resources, processes, procedures, and design considerations employed to ensure that all equipment and support items are preserved, packaged, packed, marked, handled, transported, and stored properly for short- and long-term requirements. The related analysis includes determination of environmental considerations, preservation requirement for short- and long-term storage, transportability requirements, and other methods to ensure elimination/minimization of damage to the system and its necessary support infrastructure. Acquisition logistics efforts should strive to minimize or eliminate undue/unnecessary packaging, handling, storage, and transportation requirements for the operation and maintenance of the defense System. Key emphasis is on the avoidance of damage or deterioration in safe and timely movement and storage of Systems.

2. This element includes planning and projecting the details associated with movement of the System in its shipping configuration to the ultimate destination via transportation modes and networks available and authorized for use. Specific consideration should be given to environmental constraints imposed by the System design, equipment preservation for the short and long storage, and transportability. Some items require special environmentally controlled, shock isolated containers for transport to and from repair and storage facilities via all modes of transportation (over-the-road, rail, air and sea). Customs requirements, air-shipping requirements, rail shipping requirements, container considerations, special movement precautions, mobility, and transportation System impact of the shipping mode or the contract shipper must be carefully assessed.

3. PHS&T includes material-handling equipment and packaging, handling and storage requirements, and pre-positioning of material and parts. It also includes preservation and packaging level requirements and storage requirements (for example, sensitive, proprietary, and controlled items). It further encompasses establishment of critical engineering design parameters and constraints (e.g., width, length, height, component and System rating, and weight) that must be considered during System development. Containers, forklift trucks, cargo aircraft, warehouses, commercial transport, security, packing materials, paperwork, transport schedules, preservation, cargo ships, dockworkers, pipelines, and a host of similar factors characterize packaging, handling, storage, and transportation.

4. Packaging, Handling, Storage, and Transportation is generally more of a problem for hardware than software. Hardware is usually large and bulky, whereas software may be contained in a single reel of magnetic tape. Hardware damage in transport or handing is usually repaired; software damage is usually attributable to the media conveying the software Project or to alteration of the state of information in the media and is repaired by reissuing or duplication the Project using new media.

5. Extended storage can pose a problem for volatile computer memories whose contents may be lost or altered. Hardware can be expected to deteriorate with age. Although software does not wear out, its media does. Software also tends to become obsolete very quickly because of rapid advances in the state-of-the-art.

6. PHS&T planning must consider:
   a. System constraints (such as design specifications, item configuration, and safety precautions for hazardous material).
   b. Special security requirements.
   c. Geographic and environmental restrictions
   d. Special handling equipment and procedures.
   e. Impact on spare or repair parts storage requirements.
   f. Emerging packaging, handling, storage, and transportation technologies, methods, or procedures and resource-intensive packaging, handling, storage, and transportation procedures.
   g. Environmental impacts and constraints.

PACKAGING, HANDLING, STORAGE AND TRANSPORTATION (PHS&T)

A. General Overview

1. Purpose. This standard is intended to be used in contracts for Systems and equipment to control the development, design and use of adequate packaging, handling, storage, and associated equipment and procedures for the System or equipment and to control the transportability program requirements.

2. Scope. The PHS&T design for the project will cover all Systems being acquired.

B. Background

The Contractor shall plan, develop and maintain the PHS&T program to reflect visibility in the logistics program. PHS&T planning covers the process and methods to identify PHS&T requirements, and related inputs such as design, logistics support, maintenance planning, human factors and safety data. The PHS&T program shall contribute to the acquisition of an operationally effective and supportable System, designed for the lowest LCC. The USCG ICPs are the initial point of contact for all programs. They assign PHS&T LEM duties to the appropriate Directorate for each program.

C. Definitions & Terms

1. Handling. Physical manipulation, directly or indirectly, by people (characterized as lifting, sliding, hoisting, lowering, or moving items on dollies or pallets through the use of manpower, tugs, cranes, forklifts, hoists and automated Systems). To the greatest extent possible, all components should be handled with equipment in the inventory at operating and storage sites. Generally, this equipment includes forklifts, trailers, loaders and associated preservation, packaging, packing, and marking equipment. The contractor shall handle all materials IAW best industry practices. If special handling equipment is developed, the contractor shall follow USCG acquisition processes for major end items.

2. Hazardous Materials. Substances or materials which have been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which have been identified in Title 49 of the Code of Federal Regulations, Section 172.101. HAZMAT is defined as explosives (Class 1), compressed gases (Class 2), flammable liquids (Class 3), flammable solids (Class 4), oxidizers and organic peroxides (Class 5), poisons and infectious substances (Class 6), radioactive materials (Class 7), corrosive materials (Class 8), and miscellaneous dangerous goods (Class 9), or any substance or material which has been determined to be capable of posing an unreasonable risk to health, safety, or property. The term includes hazardous substances, hazardous wastes, marine pollutants and elevated temperature materials.

3. Hazardous Materials Packaging. The contractor shall follow DoD Federal Acquisition Regulation Supplement (DFAR) 52.228-7007 when specifying packaging materials for ammunition and explosives, and DFAR 52.223-3 when specifying packaging material for HAZMAT other than ammunition, explosives, and radioactive Materials. When packaging other than that specified by the DoT is used for HAZMAT, the packaging must be of equal to or greater strength and efficiency as the packaging prescribed by the

DoT as authorized by 49 CFR 173.7. The use of non-DoT packaging must be substantiated and documented as being equal to or greater than DoT requirements according to joint service document AFI 24-210/DLAR 4145.41, "Performance Oriented Packaging (POP) of HAZMAT".

4. Hazardous Wastes. Hazardous wastes include any solid waste defined as a hazardous waste by 40 CFR 261.3.

5. Hazardous Waste Packaging. Hazardous waste must be packaged in containers required by 49 CFR or in a container of equal or greater strength and efficiency. When containers required by 49 CFR are not used, the provisions of DoD M 4160.21, Chapter VI, must be followed.

6. Hazardous Waste Labeling and Marking. Hazardous waste shipments must be labeled with appropriate DoT hazard class labels and properly completed hazardous waste label. Shipments must be marked according to 40 CFR 262.32, 49 CFR 172, and MIL-STD-129, "Standard Practice for Military Marking."

7. Life Cycle Costs. LCC drivers related to shipping containers are container costs, transportation costs based on loaded container weight and cube, container life in terms of number of trips, container maintenance costs for long term containers, container performance and labor time for packing and unpacking. Reusable container cost shall include the transportation costs of shipping the empty containers, if necessary, based upon weight and cube.

8. Mobility. The ease in which an item, usually designed with wheels or tracks, can be moved by towing, pushing or self propulsion for use on or off the highways.

9. Packaging. The processes and procedures used to protect material from deterioration, damage, or both. It includes cleaning, drying, preserving, packing, marking and unitization. MIL-STD-2073-1, "DoD Standard Practice for Military Packaging", is applicable for most packaging. For packaging that does not fall under MIL-STD-2073-1, the Contractor should follow ASTM D3951, "Standard Practice for Commercial Packaging."

10. PHS&T problem item. An equipment/item in its proposed shipping configuration that, because of its size, weight, fragility, hazardous characteristics, or lack of adequate means for lifting and tie down, or need for special permits, waivers, special equipment, handling, or special carrier services, may be denied movement or may be unacceptably delayed when moving within existing or newly designed transportation Systems.

11. Reusable containers. Shipping and storage containers which are designed for reuse without impairment of their protective function and which can be repaired and/or refitted to prolong their life or to adapt them for shipment of items other than that for which they were originally employed. Reusable shipping and storage containers are further defined in the following paragraphs.

12. Long life containers. Shipping containers having features such that they can be used repeatedly and their service life can be expected to equal the service life of the item they are designed to protect. These containers maybe refurbished by appropriate maintenance practices and restored to full usage for stockpile (100 trip minimum).

13. Short life containers. Shipping containers that can be used for a limited number of times. These containers are usually made of wood, plywood, fiberboard or similar material and includes cushioning, die-cuts, inserts, fasteners, etc., which may be described by drawings and bills of materials. These containers can usually be identified by military or federal specification numbers (10 trip minimum).

14. Safety. Safety is freedom from those conditions which can cause injury or death to personnel, or damage to or loss of equipment or property. SYS is the optimum degree of safety within the constraints of operational effectiveness, time, and cost, attained through specific application of safety management and engineering principles throughout all phases of a Systems life cycle.

15. Shelf life (SL). The total period of time, beginning with the date of manufacture/cure/assembly or inspection of test/restorative action, that an item may remain in the combined wholesale (including manufacture) and retail storage System and still maintain suitability for issue/use by the end user. Contractors are encouraged to use materials that have a SL of greater than five years during the early phases of a program.

16. Special Packaging Instruction (SPI). Detailed instructions for, constructing packages to protect items that require special preserving and packing. SPIs include details for special blocking, bracing, cushioning, shock mounts, tie down devices, or containers.

17. Transportability. The capability to move an item by towing, pushing, self-propulsion, or by a carrier via railway, highway, waterway, pipeline, ocean, or airway using existing equipment or equipment that is planned for the movement of the item.

18. Transportability Problem Item. An equipment/item in its proposed transportation configuration that may experience transportability constraints. Examples of these items are. Item is wheeled; Item overloads a designated transport medium; Item requires special handling or special loading procedures (temperature limits, pressure limits, power source required, protective service, or sensitive/classified).

D. References

1. Title 49 of the Code of Federal Regulations, Section 172.101
2. DoD Federal Acquisition Regulation Supplement (DFAR) 52.228-7007
3. DFAR 52.223-3
4. 49 CFR 173.7
5. AFI 24-210/DLAR 4145.41
6. DoDM 4160.21
7. 40 CFR 262.32
8. 49 CFR 172
9. Standard Practice for Military Marking, MIL-STD-129
10. MIL-STD-2073-1C

E. Roles & Responsibilities

1. The Contractor shall integrate the PHS&T program with the System or equipment design and SUE program to assure effective and timely accomplishment.
2. Packaging Requirements Development. The contractor shall develop a Packaging Requirement Code (PRC) for all newly procured "P" source-coded items (procured) IAW CDRL PHS&T-001. The PRC is a standardized alphabetical code found in the SM&R Code Table on the website http.//www.mtain.com/logistics/loglsa.htm. It is used by contractors to describe the packaging material and techniques necessary to protect items from the physical and environmental effects of the logistics cycle. Data products associated with the PRC are also listed in the LMI Data Products Worksheets. This data is provided early in the program (as soon as designs are stable) because of the lead time required for container development. USCG ICP will maintain technical cognizance over all non-ordnance reusable containers. Approved PRCs will be placed in the USCG ICP, Master Item File (MIF) to be used for future procurements.
3. The Contractor shall ensure the PHS&T meets the following requirements.
    a. Transportability of items and equipment, and technical adequacy of packaging designs, shall be consistent with programs test, deployment, and logistics support concepts and plans.
    b. The contractor shall incorporate handling and mobility features into items, equipment, and containers as required to facilitate handling and movement consistent with existing or planned equipment, facilities, and procedures
    c. Design, test, and production of transportation and handling equipment, containers, and packaging needed to conduct and support DT&E and OT&E and production shall be so accomplished as to assure their availability at the time and place required. They shall be suitable for use throughout the System program life without further major design and test effort unless program objectives, cost, or schedules justify otherwise, or unless deficiencies are detected which require correction.
    d. The Contractor shall determine the most cost-effective item-to-container design interface using trade-off study techniques based upon program life cycle costs. The Contractor shall conduct trade-off studies and transportability analyses to ensure compatibility between item, transportation, and handling equipment and to determine the most efficient and cost-effective packaging design required to satisfy functional requirements.
    e. The levels of preservation and packing applied to deliverable items shall be consistent with the known or projected method of delivery, program requirements, destination environment, and logistics support plans and shall be in consonance with any contractually required SUA, reliability, maintainability and corrosion prevention control programs.
    f. The Contractor shall continually evaluate performance of transportation and handling equipment and containers during System or equipment development testing to identify design and other configuration deficiencies, and the Contractor shall take corrective action as necessary to ensure that such equipment/containers will perform IAW its approved baseline. The contractor shall follow the engineering change and configuration control process IAW the CM section of this document.

g. The Contractor shall design packaging for HAZMAT to meet the requirements of Title 49 of the Code of Federal Regulations, the International Civil Aviation Organization Technical Instruction and the International Maritime Dangerous Goods Code.

h. Any PHS&T equipment developed shall be for use within the time limits indicated in the contract.

i. The PHS&T equipment shall be maintainable by service activities NLT the beginning of deployment, regardless of the date the using service is scheduled to assume SUS responsibility.

j. The PHS&T equipment shall be capable of breakout for separate procurement as identical items and does not require sole source manufacture.

k. The PHS&T equipment shall require minimum organizational maintenance.

l. The PHS&T equipment shall be capable of maintenance at the organizational level.

m. The PHS&T equipment should not require depot level maintenance. A requirement for depot level maintenance shall be supported by appropriate trade studies demonstrating the necessity.

n. Lower-tier contractors. The performing activity's PHS&T program shall ensure applicability to lower-tier contractors (subcontractors and vendors) who deliver portions or all of the System or equipment directly to the Government, or to contracts for which such lower-tier contractors have design responsibility.

4. The contractor shall follow DoD Standard Practice for Military Packaging, MIL-STD-2073-1, for all applicable packaging as defined by this standard. For packaging that does not fall under MIL-STD-2073-1, the contractor shall follow Standard Practice for Commercial Packaging, ASTM D3951.

5. Packaging Requirements Data. The contractor shall develop packaging requirements data for all new "P" source code DLR, FLRs and consumables IAW CDRL PHS&T-002. Packaging data shall be available to ICPs for review via the contractor's logistics database, along with detailed engineering data required. Packaging data shall be developed IAW MIL-PRF-49506, the guidelines of MIL-STD-2073-1C, and the criteria provided by ICPs, at the contractor's indoctrination meeting.

6. Packaging data. The Contractor shall prepare and provide preservation and packing data for items that are procured for the operational inventory IAW CDRL-PHS&T-003. The Contractor shall ensure that all packaging data and SPIs submitted (including that from lower-tier contractors) as the result of various contract data items are compatible, prior to those data being submitted to the USCG. For example, packaging data developed IAW MIL-STD-2073-1 shall be consistent with the packaging requirements specified in the CI specifications for the same item.

7. Container Design Retrieval System. The contractor shall assign existing reusable, multi-application containers for packaging of DLRs for avionics, electronic and fragile items to the maximum extent possible. ICPs will maintain technical cognizance of all containers requiring development including design specification development as well as first article approval or rejection.

8. If special, non-standard and non-commercially available packaging has to be developed, the Contractor shall first send a search request using the format prescribed in MIL-STD-2073–1 to the Container Design Retrieval System Management Office (CDRS/MO), to see if a solution already exists, before initiating a new design or production program. Use of these activities ensures standardization and promotes reusability.

9. Packaging Plan. If CDRS/MO cannot develop a packaging solution the Contractor shall develop a Packaging Plan IAW CDRL PHS&T-004. Within the Packaging Plan, the contractor shall include a trade off analysis which describes each packaging option and its development and projected manufacturing costs. The contractor shall identify all special handling procedures (for example. lifting eyes, skids, fixtures, etc.), and any existing specific packaging, handling and transportation plans used as a basis for contractor transportability design considerations.

10. Packaging Cost Analysis. Upon approval, the contractor shall develop a Packaging Cost Analysis IAW CDRL PHS&T-005, “Packaging Cost Analysis”.

11. The contractor shall develop a packaging design IAW CDRL PHS&T-006, which will be approved by the USCG. It shall consist of Level III drawings and all associated technical data, and will provide enough data to allow for manufacturing. If deemed appropriate by the USCG, the contractor shall test the packaging IAW Specification for Testing of HAZMAT Packaging, ASTM D 4919; Federal Test Method Standard 101; “Test Procedures for Packaging Materials”, and Creep Properties of Packaging Cushioning Materials, ASTM D2221. A copy of this approved data shall be delivered to the USCG.

12. First Article Unit. The contractor shall fabricate a first article unit for approval by the USCG. This unit shall be used for testing if required. Upon approval, full rate production may begin. The following categories of PHS&T equipment as a minimum require prior service approval:

    (a) Containers, unit loads, explosives, and other HAZMAT

    (b) Handling equipment for the items categorized in (a.) above, in or out of containers

    (c) PHS&T equipment (including unit loads) for all other transportability problem items

    (d) PHS&T equipment and procedures for System prime and critical items

    (e) PHS&T equipment and procedures for high-value components singled out by the requiring authority for intensified supply management

    (f) PHS&T equipment and procedures for combat consumables, not otherwise mentioned herein.

13. The contractor shall bar code all items and packages IAW MIL-STD-1189B or equivalent.

14. The contractor shall mark all items and packages IAW MIL-STD-129P.

15. Interim Support Period Requirements. The contractor shall preserve, package, pack and mark interim support material as specified below and shall contractually require the same from vendors and subcontractors.

(a) ASTM D 3951-95. Commercial packaging and packing, as equivalent to MIL-STD-2073-1C, Level C/C, for short term (6 months or less), CONUS shipments only.

(b) Level A Packing, MIL-STD-2073-1C. For long term storage, surface X-CONUS shipments.

(c) Level B Packing, MIL-STD-2073-1C. For long term storage, air X-CONUS, surface containerized X-CONUS, or CONUS shipments.

16. The contractor shall report to ICP any damage incurred to ICP-cognizant items during forward or retrograde shipment under guidance of the Supply Policy and Procedures Manual, COMDTINST 4400.19 (series).

17. Hazardous Materials. The contractor shall identify any HAZMAT, and prepare and provide Material Safety Data Sheets IAW FED-STD-313, for CDRL-PHS&T-007. These sheets will be approved and delivered to the USCG Acquisition Support Activity.

18. Electrostatic Discharge Control. The contractor shall protect packaged parts and equipment by developing and employing an electrostatic discharge control program IAW, Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment, MIL-STD-1686. All printed circuit card assemblies shall have an initial wrap of cushioning material conforming to (PPP-C-795, Class 2 applies) or cushioned pouch conforming to (MIL-P-81997, Type 1 applies). The circuit card and its initial cushioning or pouch shall then be placed into a heat-sealed bag conforming to MIL-B-117G (Type I, Class F, Style 1 applies).

19. Age-deteriorable Materials. The Contractor shall manage deteriorable elastomers with expected SL of five (5) years or less shall be IAW the Navy/DoD Storage Time Limitation (SL) program and shall be justified for selection IAW CDRL-PHS&T-008. Expected SL shall be as specified in MIL-HDBK-695.

20. Items with less than 18 months SL are candidates for direct shipment between manufacturer and the user activity.

21. Plastics Removal in Marine Environment (PRIME). The contractor shall ensure that only non-plastic packaging materials are to be used for items entering the SUS except in the following cases.

    (a) When greaseproof, waterproof or water vapor proof protection is specified or required for circuit card assemblies, electronic modules, etc., and non-plastic packaging materials cannot provide the necessary protection.

    (b) When electrostatic discharge protection is specified or required for circuit card assemblies, electronic modules, etc., and non-plastic packaging materials cannot provide the necessary protection.

    (c) When reusable containers are specified or required.

    (d) When the physical/mechanical protection required by the item cannot be provided by non-plastic packaging material.

22. Corrosion Control. The contractor shall employ proper packaging corrosion control IAW TO 00-85-3, “Corrosion Control for Packaging. This document provides technical

guidance for the procedures involved in cleaning, drying, preserving, wrapping, cushioning, and placing the item in the unit container.

23. Handling. The contractor shall handle all materials IAW best industry practices. If special handling equipment is developed, the contractor shall follow USCG acquisition processes for major end items.

F. Storage.

1. Storage Warehouse for GFE. The contractor shall store GFE and GFM parts and end items in a secure warehouse IAW best industry practices.
2. Procedures for the control of Government property in the hands of the performing activity will be established and maintained as required. The Contractor shall report all cases of loss, damage, or destruction will to the Property Administrator or other authorized Government personnel. The Contractor shall package GFE IAW instructions furnished by the Government. When packaging instructions have not been furnished, the following must be accomplished.
   (a) Inspect GFE upon receipt and notify the Government of any discrepancies.
   (b) Store for use.
   (c) Periodically, visually inspect humidity indicators on Method II packs, repair leaks in carriers, and re-desiccate as necessary.
   (d) Touch up preservation coatings or apply paint where coatings are thin or absent from metal surfaces.
3. For each ASSET, the contractor shall develop and submit a Delivery Plan IAW CDRL PHS&T-009.
4. The ASSET shall be delivered to an established delivery location designated by the Contracting Officer. The delivery location shall be a CG facility that is suitable for the inspection and Acceptance Trials (AT) of the ASSET, and support the logistics requirements of these events. The contractor is responsible for all arrangements to support the delivery and acceptance of the ASSET except for CG representatives' travel and lodging.
5. IUID Requirements. The Contractor shall implement and execute an IUID program IAW the DoD Guide to Uniquely Identifying Items, Assuring Valuation, Accountability and Control of Government Property, Version 1.6 dated June 01, 2006 IAW CDRL PHS&T-010. The contractor shall assist the government in determining what item(s) to have uniquely identified for tracking and cost purposes.
6. All configuration managed equipment shall have visible name plate data located in an accessible position on all installed equipment. The name plate data shall be easily read without the aid of any objects to enhance its visibility or clarity. The nameplate data shall clearly state the type of equipment installed (noun name, nomenclature of equipment), make, model and/or SN, manufacturer's name, date of manufacture, place of manufacture and NSN if available. The contractor shall develop specific item identification marking requirements using MIL-STD-130L as a guide.

G. Transportation.

1. This section contains requirements for transportability. Any movement of material from the performing activity to the procuring activity must be in a manner consistent with the best transportation practices which protect the interests of the Government. To assure timely delivery of Systems/equipment, the requiring authority must be able to obtain responsible, economical, and efficient transportation in known areas of deployment and federal and local statutes and international agreements, when appropriate. The development of a transportability report, as contractually required by a DD Form 1423, should identify the transportation requirements to support the Systems/equipment during all phases of its life-cycle.
2. Safety will be a primary transportability objective.
3. Transportability criteria shall comply with DOD directives relating to environmental criteria, the intent of the NEPA, and with the criteria and standards published by the Environmental Protection Agency. The intent of state and local pollution abatement laws, regulations, criteria, and standards also shall apply.
4. The most economical mode of transportation should be used, consistent with the transportability evaluation, hazard classification, transportation priority, and required delivery date.
5. The contractor shall develop and deliver a Transportability Report IAW CDRL PHS&T-011. This plan will document transportation data on all major end items, spare and repair parts, and ground SUE that will be delivered to the USCG. Data should be requested only for transportability problem items. The following are examples of transportability problem items:
   (a) Item is wheeled or tracked.
   (b) Item overloads a designated transport medium.
   (c) Item requires special handling or specialized loading procedures (temperature limits, pressure limits, power source required, protective service, or sensitive/classified).
   (d) Item contains HAZMAT.
   (e) Item has inadequate ramp clearance for ramp inclines of 15 degrees.
   (f) Item exceeds any of the following conditions.

      Length = 20'
      Height = 8'
      Weight = 10,000 lbs
      Weight per linear foot = 1,600 lbs
      Floor contact pressure = 50 psi
      Maximum axle load (pneumatic tires) = 5,000 lbs
      Maximum wheel load (pneumatic tires) = 2,500 lbs
      Tire pressure = 90 psi

6. The contractor shall develop and deliver a Transportation Data Report for Oversized and Hazardous Cargo IAW CDRL PHS&T-012. This plan will describe how the contractor will transport oversized and hazardous cargoes.

Listings of Applicable CDRLS and DIDs for this Section

CDRL #	Title	Sub-Title	DID No.
PHS&T-001	Packaging Requirements Code		DI-Pack-001 (New DID)
PHS&T-002	Packaging Requirements Data	Test Package	DI-SESS-81525B
PHS&T-003	Packaging Requirements Data	Packaging Kit Content List	DI-MIC-81499
PHS&T-004	Packaging Requirements Data	Packaging Development Data Report	DI-PACK-81582
PHS&T-005	Packaging Data	Logistics Management Information (LMI) Product (s)	DI-ALSS-81529
PHS&T-006	Packaging Data	Preservation and Packing Data	DI-PACK-80120B
PHS&T-007	Packaging Plan	Packaging Plan	DI-PACK-80455
PHS&T-008	Packaging Plan	Packaging test Plan	DI-PACK-80456
PHS&T-009	Packaging Plan	Packaging Test Report	DI-PACK-80457
PHS&T-010	Packaging Plan	Special Packaging Instructions	DI-PACK-80121B
PHS&T-011	Packaging Cost Analysis	Packaging Cost Analysis	DI-PACK-80458
PHS&T-012	Packaging Design	Design Review Information Package (DRIP)	DI-SESS-81757
PHS&T-013	Packaging Design	Container Design Retrieval System (CDRS) Search Request	DI-PACK-80683B
PHS&T-014	Packaging Design	Container Design Retrieval System (CDRS) Data Input	DI-PACK-80684B
PHS&T-016	Packaging Design	Preservation, Packaging, and Packing (PP&P) Drawing (s)	DI-DRPR-81718
PHS&T-017	Manufacturer Safety Data Sheet	Hazardous Material Summary	DI-ILSS-81168A
PHS&T-018	Manufacturer Safety Data Sheet	Hazardous Materials Management Program (HMMP) Report	DI-MISC-81397A
PHS&T-019	Manufacturer Safety Data Sheet	Hazardous Materials Management Program (HMMP) Plan	DI-MGMT-81398A

CDRL #	Title	Sub-Title	DID No.
PHS&T-020	Manufacturer Safety Data Sheet	Operating Procedures for HAZMAT	DI-SAFT-80402
PHS&T-021	Age-Deteriorable Material Justification	Stocked Item Storage and Serviceability Analysis	DI-MISC-80489
PHS&T-022	Delivery Plan	Phased Support Plan	DI-ALSS-80037B
PHS&T-023	Delivery Plan	Management Plan	DI-MGMT-80004A
PHS&T-024	Delivery Plan	Report, Production or Delivery Problem (s)	DI-MGMT-81178
PHS&T-025	Delivery Plan	Transition Plan	DI-MGMT-80790
PHS&T-026	IUID Registry		DI-PACK-010 (New DID)
PHS&T-027	Transportability Report	Transportation Plan	DI-PACK-80877
PHS&T-028	Transportability Report	Transportation Data Report	DI-PACK-80877A
PHS&T-029	Transportability Report	Transportability Report	DI-PACK-80880C
PHS&T-030	Transportability Report	Air Transportability Report	DI-PACK-80932
PHS&T-031	Transportability Report	Report of Shipping (ITEM) and Packaging Discrepancy	DI-MGMT-80503
PHS&T-032	Transportability Report for Oversized and Hazardous Items	Transportability Report	DI-PACK-80880C
PHS&T-033	Transportability Report for Oversized and Hazardous Items	Air Transportability Report	DI-PACK-80932

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Requirements Codes
3. Subtitle (If Applicable).	
4. Authority.	DI-PACK-0001
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging requirement codes shall meet the requirements of MIL-STD-2073-1E; Appendix A; E; and MIL-PRF-49506.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. First submission obtained during planning and requirements definition reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-002
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Requirements Data
3. Subtitle (If Applicable).	Test Package
4. Authority.	DI-SESS-81525B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging Requirements Data shall meet the requirements of MIL-STD-2073-1E, Appendix A; E, and MIL-PRF-49506.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. First submission obtained during planning and requirements definition review. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-003
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Requirements Data
3. Subtitle (If Applicable).	Packaging Kit Content List
4. Authority.	DI-MIC-81499
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging Requirements Data shall meet the requirements of MIL-STD-2073-1E, Appendix A; E, and MIL-PRF-49506.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. First submission obtained during planning and requirements definition review. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-004
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Requirements Data
3. Subtitle (If Applicable).	Packaging Development Data Report
4. Authority.	DI-PACK-81582
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging Requirements Data shall meet the requirements of MIL-STD-2073-1E, Appendix A; E, and MIL-PRF-49506.
BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.
BLK12. First submission obtained during planning and requirements definition review. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-005
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Data
3. Subtitle (If Applicable).	Logistics Management Information (LMI) Product (s)
4. Authority.	DI-ALSS-81529
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	Annually
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging Data shall meet requirements of MIL-STD-2073-1E, Appendixes A, paragraph A5.5; and E paragraph E.3, MIL-STD-130, and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review.

BLK12, 13. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-006
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Data
3. Subtitle (If Applicable).	Preservation and Packing Data
4. Authority.	DI-PACK-80120B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	Annually
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging Data shall meet requirements of MIL-STD-2073-1E, Appendixes A, paragraph A5.5; and E paragraph E.3, MIL-STD-130, and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for Government review.

BLK12, 13. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-007
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-PACK-80455
5. Contract Reference.	
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	LT
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging plan shall meet the requirements of MIL-STD-2073-1E, Appendixes A and E.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-008
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Plan
3. Subtitle (If Applicable).	Packaging Test Plan
4. Authority.	DI-PACK-80456
5. Contract Reference.	
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	LT
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging plan shall meet the requirements of MIL-STD-2073-1E, Appendixes A and E.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-009
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Plan
3. Subtitle (If Applicable).	Packaging Test Report
4. Authority.	DI-PACK-80457
5. Contract Reference.	
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	LT
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging plan shall meet the requirements of MIL-STD-2073-1E, Appendixes A and E.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-010
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Plan
3. Subtitle (If Applicable).	Special Packing Instructions
4. Authority.	DI-PACK-80121B
5. Contract Reference.	
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	LT
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging plan shall meet the requirements of MIL-STD-2073-1E, Appendixes A and E.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and requirements definition review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-011
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Cost Analysis
3. Subtitle (If Applicable).	
4. Authority.	DI-PACK-809458
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Packaging Cost Analysis shall meet the requirements of MIL-STD-2073-1E.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design review. Subsequent submission when changes incorporate new initiative, new technology and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-012
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Design
3. Subtitle (If Applicable).	Design Review Information Package (DRIP)
4. Authority.	DI-SESS-81757
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging design shall meet the requirements of MIL-STD-2073-1E, paragraph 3.11, and Appendixes C section5; MIL-STD-130; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-013
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Design
3. Subtitle (If Applicable).	Container Design Retrieval System (CDRS) Search Request
4. Authority.	DI-PACK-80683B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging design shall meet the requirements of MIL-STD-2073-1E, paragraph 3.11, and Appendixes C section5; MIL-STD-130; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-014
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Design
3. Subtitle (If Applicable).	Container Design Retrieval System (CDRS) Data Input
4. Authority.	DI-PACK-80684B
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging design shall meet the requirements of MIL-STD-2073-1E, paragraph 3.11, and Appendixes C section5; MIL-STD-130; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-015
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Design
3. Subtitle (If Applicable).	Installation Design Reservation Data
4. Authority.	DI-DRPR-81243
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. Packaging design shall meet the requirements of MIL-STD-2073-1E, paragraph 3.11, and Appendixes C section5; MIL-STD-130; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-016
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Packaging Design
3. Subtitle (If Applicable).	Preservation, Packaging, and Packing (PP&P) Drawing (s)
4. Authority.	DI-DRPR-81718
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes

16. Remarks.

BLK04. Packaging design shall meet the requirements of MIL-STD-2073-1E, paragraph 3.11, and Appendixes C section5; MIL-STD-130; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, requirements definition, and design reviews. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-017
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Manufacturer Safety Data Sheets
3. Subtitle (If Applicable).	Hazardous Material Summary
4. Authority.	DI-ILSS-81168A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes

16. Remarks.

BLK04. Manufacturer Safety Data Sheets shall meet the requirements of MIL-STD-2073-1E, Appendixes A, section A.4; MIL-STD-138802B and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, and throughout the remaining selected stage reviews, as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-018
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Manufacturer Safety Data Sheets
3. Subtitle (If Applicable).	Hazardous Materials Management Program (HMMP) Report
4. Authority.	DI-MISC-81397A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy: Yes Hard Copy: 1

16. Remarks.

BLK04. Manufacturer Safety Data Sheets shall meet the requirements of MIL-STD-2073-1E, Appendixes A, section A.4; MIL-STD-138802B and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, and throughout the remaining selected stage reviews, as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-019
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Manufacturer Safety Data Sheets
3. Subtitle (If Applicable).	Hazardous Materials Management Program (HMMP) Plan
4. Authority.	DI-MGMT-81398A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy: Yes Hard Copy: 1

16. Remarks.

BLK04. Manufacturer Safety Data Sheets shall meet the requirements of MIL-STD-2073-1E, Appendixes A, section A.4; MIL-STD-138802B and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, and throughout the remaining selected stage reviews, as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-020
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Manufacturer Safety Data Sheets
3. Subtitle (If Applicable).	Operating Procedures for Hazardous Materials
4. Authority.	DI-SAFT-80402
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	
11. As of Date.	
12. Date of First Submission.	
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy: Yes Hard Copy: 1

16. Remarks.

BLK04. Manufacturer Safety Data Sheets shall meet the requirements of MIL-STD-2073-1E, Appendixes A, section A.4; MIL-STD-138802B and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning, and throughout the remaining selected stage reviews, as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiative, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-021
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Age-deterioable Material Justification
3. Subtitle (If Applicable).	
4. Authority.	Stocked Item Storage and Serviceability Analysis (DI-MISC-80489)
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. The CDRL-PHST-021 shall be in the contractor format. Each Age-deteriorable Material Justification Requirement shall meet the requirements of MIL-STD-2073-1; MIL-PRF-49506; and MIL-STD-130N.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission before PHST Review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-022
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Delivery Plan
3. Subtitle (If Applicable).	Phased Support Plan
4. Authority.	DI-ALSS-80037
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Delivery Plan shall meet the requirements of MIL-STD-2073-1E; MIL-PRF-49506 and DoD 4245.7M as well as the respective above DID.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and throughout the remaining selected stage reviews as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-023
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Delivery Plan
3. Subtitle (If Applicable).	Management Plan
4. Authority.	DI-MGMT-80004A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Delivery Plan shall meet the requirements of MIL-STD-2073-1E; MIL-PRF-49506 and DoD 4245.7M as well as the respective above DID.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and throughout the remaining selected stage reviews as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-024
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Delivery Plan
3. Subtitle (If Applicable).	Report, Production or Delivery Problem(s)
4. Authority.	DI-MGMT-81178
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Delivery Plan shall meet the requirements of MIL-STD-2073-1E; MIL-PRF-49506 and DoD 4245.7M as well as the respective above DID.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and throughout the remaining selected stage reviews as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-025
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Delivery Plan
3. Subtitle (If Applicable).	Transition Plan
4. Authority.	DI-MGMT-80790
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Delivery Plan shall meet the requirements of MIL-STD-2073-1E; MIL-PRF-49506 and DoD 4245.7M as well as the respective above DID.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission obtained during project planning and throughout the remaining selected stage reviews as well as the operations and maintenance and disposition. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-026
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	IUID Registry
3. Subtitle (If Applicable).	
4. Authority.	DI-PACK-010
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 1

16. Remarks.

BLK04. UIID Registry shall meet the requirements of MIL-STD-2073-1E; Appendixes A and J; MIL-STD-130N paragraph 4.0 and 5.0; and MIL-PRF-49506.

BLK08. Government review and approval for content, accuracy and competence. Allow 60 days for Government review and approval.

BLK12. First submission before PHS&T Review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-027
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report
3. Subtitle (If Applicable).	Transportation Plan
4. Authority.	DI-PACK-80877
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report shall meet the requirements of MIL-STD-2073-1E; MIL-STD-209 and MIL-STD-1366D, paragraph 4.5 as well as the respective DIDs.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review.. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-028
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report
3. Subtitle (If Applicable).	Transportation Data Report
4. Authority.	DI-PACK-8077A
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report shall meet the requirements of MIL-STD-2073-1E; MIL-STD-209 and MIL-STD-1366D, paragraph 4.5 as well as the respective DIDs.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review.. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-029
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report
3. Subtitle (If Applicable).	
4. Authority.	DI-PACK-80880C
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report shall meet the requirements of MIL-STD-2073-1E; MIL-STD-209 and MIL-STD-1366D, paragraph 4.5 as well as the respective DIDs.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review.. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-030
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report
3. Subtitle (If Applicable).	Air Transportability Report
4. Authority.	DI-PACK-80932
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report shall meet the requirements of MIL-STD-2073-1E; MIL-STD-209 and MIL-STD-1366D, paragraph 4.5 as well as the respective DIDs.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review.. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-031
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report
3. Subtitle (If Applicable).	Report of Shipping (ITEM) and Packaging Discrepancy
4. Authority.	DI-MGMT-80503
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ANNLY
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report shall meet the requirements of MIL-STD-2073-1E; MIL-STD-209 and MIL-STD-1366D, paragraph 4.5 as well as the respective DIDs.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review.. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-032
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report for Oversized and Hazardous Items
3. Subtitle (If Applicable).	Transportability Report
4. Authority.	DI-PACK-80880C
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report for Oversized and Hazardous Items shall meet the requirements of MIL-STD-2073-1E, MIL-STD-209 and MIL-STD-1366D paragraph 4.5 as well as the respective DIDs. The DIDs can be tailored to program requirements with approval of the service transportability agent.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-PHS&T-033
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Transportability Report for Oversized and Hazardous Items
3. Subtitle (If Applicable).	Air Transportability Report
4. Authority.	DI-PACK-80932
5. Contract Reference.	See SOW Paragraph X.X.X.X
6. Requiring Office.	SFLC, ALC
7. DD 250 (Material Inspection & Receiving Report) Required.	
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	ASREQ
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Project Office, Project Resident Office, Requiring Office
15. Total.	Electronic Copy. Yes Hard Copy. 3

16. Remarks.

BLK04. Transportability Report for Oversized and Hazardous Items shall meet the requirements of MIL-STD-2073-1E, MIL-STD-209 and MIL-STD-1366D paragraph 4.5 as well as the respective DIDs. The DIDs can be tailored to program requirements with approval of the service transportability agent.

BLK08. Government review and approval for content, accuracy, and completeness. Allow 60 days for government review.

BLK12. First submission deploy/support during project disposition stage review. Subsequent submission when changes incorporate new initiatives, new technology, and revised or new federal requirements.

Quality Assurance (General Description)

The U.S. Coast Guard abides by the definitions from American National Standards Institute (ANSI), International Organization for Standardization (ISO), and American Society for Quality (ASQ), international standard ANSI/ISO/ASQ Q9000-2000 (ISO 9000), *Quality Management Systems—Fundamentals and Vocabulary*.

1. Quality is the degree to which a set of inherent characteristics fulfills requirements. It may apply to a product or process. Inherent characteristics may be physical, sensory, behavioral, temporal, ergonomic, functional, etc.
2. Quality management represents the organized activities to direct and control an organization with regard to quality. It is an enterprise level process that may apply to the project office's or the contractor's quality activities. The contractor's quality management system (QMS) guides their internal activities.
3. Quality assurance is the part of quality management focused on providing confidence that quality requirements will be fulfilled.

QUALITY ASSURANCE (QUA)

A. General Overview

1. Purpose. This section specifies the requirements the contractor shall fulfill to ensure the contractor continually applies QUA principles and practices into the System's design.
2. Scope. The QUA practices and principles for the project will cover all Systems being acquired.

B. Background

The ISO 9000 family of standards represents an international consensus on good quality management practices. It consists of standards and guidelines relating to quality management Systems and related supporting standards. ISO 9001.2000 is the standard that provides a set of standardized requirements for a quality management System, regardless of what the user organization does, its size, or whether it is in the private, or public sector. It is the only standard in the family against which organizations can be certified. The ISO 9001.2000 standard provides a tried and tested framework for taking a Systematic approach to managing the organization's processes so that they consistently turn out product that satisfies customers' expectations.

C. Definitions & Terms

1. Organization. as used in the QUA Standard denotes the contractor.
2. Customer. as used in the QUA Standard denotes the USCG.

D. Reference - ISO 9001.2000

E. Roles & Responsibilities

1. The contractor shall develop, implement, and maintain a Quality Plan IAW CDRL-QUA-001. The Quality Plan shall provide traceability to the contractor's ISO 9001 compliant quality System, or other acceptable standard, as documented and described in the contractor's Quality Manual. The contractor shall comply with the approved Quality Plan throughout the duration of the contract.
2. As they apply to all of the [SYSTEM] System requirements including: design, construction, testing, delivery, logistics support processes, and associated data, the Quality Plan shall address the contractor's.
   a. quality management System.
   b. management responsibility.
   c. resource management.
   d. product realization.
   e. measurement analysis.
   f. risk management.
   g. improvement procedures.

3. QUA Certification. The contractor shall have or attain and maintain ISO, or other acceptable standard, certification throughout the contract period. The contractor shall document its QUA certification in the Quality Plan.

SAMPLE PROJECT TITLE
CONTRACT DATA REQUIREMENTS LIST CDRL-QUA-001
CONTRACT NUMBER

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

1. Sequence Number.	
2. Title of Data Item.	Quality Management Plan
3. Subtitle (If Applicable).	
4. Authority.	DI-QCIC-81722
5. Contract Reference.	SOW X.X.X.X
6. Requiring Office.	SFLC, ALC, PRO
7. DD 250 (Material Inspection & Receiving Report) Required.	See Block 16
8. Approval Code.	See Block 16
9. Distribution Statement Required.	IAW DoD Directive 5230.24
10. Frequency.	See Block 16
11. As of Date.	
12. Date of First Submission.	See Block 16
13. Date of Subsequent Submission.	
14. Distribution.	Electronic
15. Total.	

16. Remarks and Tailoring for Specific Contracts.

BLK08. Allow 90 days for Government review and approval.
BLK10. Inspection and Approval will be accomplished by the USCG Project Office or an organization designated by them. Electronic copies shall be sent directly to the USCG Project Office or the organization designed by them.
The contractor shall document its ISO certification in the Quality Plan.
As They apply to all of the [SYSTEM] System requirements including: design, construction, testing, deliver, logistics support processes, and associated data, the Quality Plan shall address the contractor's:

1. quality management System.
2. management responsibility.
3. resource management.
4. product realization.
5. measurement, analysis, and improvement procedures.

Overview for Technical Data, Technical Manuals and Drawings

The USCG is undergoing a major modernization and transformation effort. Part of the logistics transformation is determining the type of technical data, drawings and technical manuals that will be required to sustain our future fleet of Systems.

The Configuration Management Division, Commandant (CG-444) has the responsibility for determining the policy, process, and information requirements for technical data and drawings. To that end, Commandant (CG-444) has chartered a USCG-wide working group to define solutions to the USCG's future needs.

Until the working group has finalized the projected requirements, this section of the SOW language and CDRL templates will be TBD.

DATA ITEM DESCRIPTIONS (DIDs)

Data Item Description Numbers	Data Item Description Titles
DI-ADMIN-61505	Report, Record of Meeting/Minutes
DI-ADMIN-81250A	Conference Minutes
DI-ALSS-80037B	Phased Support Plan
DI-ALSS-81529	Logistics Management Information Data Product (LMISDP)
DI-ALSS-81530	Logistics Management Information Summaries (LMIS)
DI-CMAN-80858B	CM Plan
DI-CMAN-80639C	Configuration Change Control
DI-CMAN-80640C	Request for Deviation
DI-CMAN-80642C	Configuration Change Control
DI-CMAN-81022C	Functional Configuration Audit (FCA) Report
DI-CMAN-81022C	Physical Configuration Audit (PCA)
DI-CMAN-81253	Configuration Status Accounting Information
DI-CMAN-81293	Configuration Item Documentation Recommendation
DI-DRPR-81243	Installation Design Reservation Data
DI-DRPR-81718	Preservation, Packaging, and Packing (PP&P) Drawing(s)
DI-GDRQ-80941	Standardization Accomplishment Report (SAR)
DI-HFAC-81742	Human Engineering Program Plan
DI-ILSS-80095	Integrated Logistics Support Plan (ISLP)
DI-ILSS-81168A	Hazardous Material Summary
DI-IPSC-80590B	Computer Program End Item Documentation
DI-IPSC-80942	Computer Software System Document (CSSD)
DI-IPSC-81427A	Software Development Plan (SDP)
DI-IPSC-81428A	Software Installation Plan (SIP)
DI-IPSC-81429	Software Transition Plan (STP)
DI-IPSC-81433A	Software Requirements Specification
DI-IPSC-81435A	Software Design Description (SDD)

Data Item Description Numbers	Data Item Description Titles
DI-IPSC-81438A	Software Test Plan (STP)
DI-IPSC-81439A	Software Test Description (STD)
DI-IPSC-81440A	Software Test Report (STR)
DI-IPSC-81441A	Software Product Specification (SPS)
DI-IPSC-81442A	Software Vision Description (SVD)
DI-IPSC-81443A	Software User Manual (SUM)
DI-IPSC-81444A	Software Center Operator Manual (SCOM)
DI-IPSC-81446	Computer Operation Manual (COM)
DI-IPSC-81488	Computer Software Product
DI-MCCR-80459	Software Developmental Status Report (SDSR)
DI-MGMT-80004A	Management Plan
DI-MGMT-80061A	Engineering and Technical Services Accomplishment Report
DI-MGMT-80124	System Engineering Management Plan (SEMP)
DI-MGMT-80227	Contractor’s Progress, Status and Management Report
DI-MGMT-80368A	Status Report
DI-MGMT-80503	Report of Shipping (ITEM) and Packaging Discrepancy
DI-MGMT-80790	Transition Plan
DI-MGMT-81024	System Engineering Management Plan
DI-MGMT-81178	Report, Production or Delivery Problem(s)
DI-MGMT-81334C	Contract Work Breakdown Structure (WBS)
DI-MGMT-81398A	Hazardous Materials Management Program (HMMP) Plan
DI-MGMT-81739	Software Resources Data Reporting; Initial Developer Report and Data Dictionary
DI-MGMT-81740	Software resources Data Reporting; Final Developer Report and Data Dictionary
DI-MISC-80043A	Ammunition data Card (ADC)
DI-MISC-80048	Scientific and Technical Reports Summary
DI-MISC-80489	Stocked Item Storage and Serviceability Analysis

Data Item Description Numbers	Data Item Description Titles
DI-MISC-80508A	Technical Report Study/Services
DI-MISC-80508B	Technical Report-Study/Services
DI-MISC-80711A	Scientific and Technical Reports
DI-MISC-81397A	Hazardous Materials Management Program (HMMP) Report
DI-MNTY-80979	Planned Maintenance System (PMS) Master System and SubSystem Index
DI-MNTY-80980	Planned Maintenance System (PMS) Failure Modes and Effects Analysis (FMEA)
DI-MNTY-80981	Planned Maintenance System (PMS) Functional Failure Analysis (FFA)
DI-MNTY-80982	Planned Maintenance System (PMS) Functionally Significant Items (FSI)
DI-MNTY-80983	Planned Maintenance System (PMS) Additional Functionally Significant Item (AFSI) Index Selection Report
DI-MNTY-80984	Planned Maintenance System (PMS) Logic Tree Analysis with Supporting Rationale and Justification
DI-MNTY-80985	Planned Maintenance System (PMS) Servicing and Lubrication Analysis
DI-MNTY-80986	Planned Maintenance System (PMS) Requirement Index
DI-MNTY-80987	Planned Maintenance System (PMS) Procedure Evaluation Sheet (PES)
DI-MNTY-80988	Planned Maintenance System (PMS) Task Definition
DI-MNTY-80989	Planned Maintenance System (PMS) Inactive Equipment Maintenance (IEM) Requirement Analysis
DI-MNTY-80990	Planned Maintenance System (PMS) Reliability Centered Maintenance (RCM) Documentation Control Sheet
DI-MNTY-80991	Planned Maintenance System (PMS) Maintenance Requirement Card
DI-MNTY-80992	Planned Maintenance System (PMS) Maintenance Index Page (MIP)
DI-MNTY-80993	Planned Maintenance System (PMS) Quality Assurance Check Sheet

Data Item Description Numbers	Data Item Description Titles
DI-MNTY-80994	Planned Maintenance System (PMS) Functional Block Diagram
DI-NDTI-80566A	Test Plan
DI-PACK-80120B	Preservation and Packaging Data
DI-PACK-80121B	Special Packaging Instructions (SPI)
DI-PACK-80455	Packaging Plan
DI-PACK-80456	Packaging Test Plan
DI-PACK-80457	Packaging Test Report
DI-PACK-80458	Packaging Cost Analysis
DI-PACK-80683B	Container Design Retrieval System (CDRS) Search Request
DI-PACK-80684B	Container Design Retrieval System (CDRS) Data Input
DI-PACK-80877	Transportation Plan
DI-PACK-80877A	Transportation Data Report
DI-PACK-80880C	Transportability Report
DI-PACK-80932	Air Transportability Report
DI-PACK-81582	Packaging Development Data Report
DI-RELI-81500	Survivability Cost Effectiveness Tradeoff Studies Report
DI-SAFT-80402	Operating Procedures for Hazardous Materials
DI-SAFT-81626	System Safety Program Plan
DI-SAFT-80101B	System Safety Hazard Analysis Report
DI-SAFT-80102B	Safety Assessment Report (SAR)
DI-SAFT-80103B	Engineering Change Proposals System Safety Report (ECPSSR)
DI-SAFT-80104B	Waiver or Deviation System Safety Report (WDSSR)
DI-SAFT-80105B	System Safety Program Progress Report
DI-SAFT-80106B	Health Hazard Assessment Report
DI-SAFT-81065	Safety Studies Report (SSR)
DI-SAFT-81066	Safety Studies Plan (SSP)
DI-SAFT-80184A	Radiation Hazard Control Procedures (RHCP)

Data Item Description Numbers	Data Item Description Titles
DI-SAFT-80931A	Explosive Ordnance Disposal Data
DI-SAFT-81299B	Explosive Hazard Classification Data
DI-SAFT-81300A	Mishap Risk Assessment Report (MRAR)
DI-SDMP-81748	Parts Management Plan
DI-SESS-81646	Configuration Audit Plan
DI-SESS-81757	Design Review Information Package (DRIP)

ACRONYM LIST

Acronym	Explanation
ABL	Allocated Baseline
ACN	Activity Control Number
AC&I	Acquisition, Construction, and Improvement
ADA	Acquisition Decision Authority
ADC	Ammunition Data Card
ADE	Acquisition Decision Event
AEL	Allowance Equipage List
AFSI	Additional Functionally Significant Item
AIPC	Alternate Indentured Product Code
AIT	Automatic Identification Technology
ALC	Aviation Logistics Center
AMIO	Alien Migrant Interdiction Operations
ANSI	American National Standards Institute
Ao	Operational Availability
APB	Acquisition Program Baseline
APL	Allowance Parts List
APO	Asset Project Office
ARB	Acquisition Review Board
ASTD	American Society for Training Development
ASQ	American Society for Quality
AT	Acceptance Trials
ATE	Automated Test Equipment
BAF	Baseline Asset File
BCA	Business Case Analysis
BIT	Built-In Test
BITE	Built-In Test Equipment
BWI	Boating While Intoxicated
C4&IT	Command, Control, Communications, Computers, and Information Technology Systems
CAGE	Commercial and Government Entity
CBIL	Common and Bulk Items List
CBM+	Condition Based Maintenance Plus
CCB	Configuration Control Board
CDD	Capabilities and Development Document
CDE	Common Data Element
CDM	Configuration Data Manager
CDR	Critical Design Review
CDRL	Contract Data Requirement List
CDRS	Container Design Retrieval System

CDRS/MO	Container Design Retrieval System Management Office
CF	Contractor Furnished
CFE	Contractor Furnished Equipment
CFM	Contractor Furnished Material
CG	Coast Guard
CGAE	Coast Guard Acquisition Executive
CGARB	Coast Guard Acquisition Review Council
CG-LIMS	Coast Guard Logistics Information Management System
CI	Configuration Item
CID	Component Identification Data
CILRU	Configuration Item Line Replaceable Unit
CM	Configuration Management
CMP	Configuration Management Plan
COI	Certificate of Identicality
COM	Computer Operation Manual
COMDTINST	Commandant Instruction
CONOP	Concept of Operations
COSAL	Consolidated Shipboard Allowance List
COTS	Commercial Off-The-Shelf
CPLP	Certified Professional in Learning and Performance
CRLCMP	Computer Resources Life-Cycle Management Plan
CRS	Computer Resources Support
CRSA	Computer Resources Support Analysis
CRWG	Computer Resources Working Group
CSA	Configuration Status Accounting
CSAS	Configuration Status Accounting System
CSCI	Computer Software Configuration Item
CSI	Construction Specification Institute
CSP	Computer Software Product
CSSD	Computer Software System Development
CTIC	Contractor Technical Information Code
CWBS	Contract Work Breakdown Structure
DACA	Days After Contract Award
DCMS	Deputy Commandant for Mission Support
DCN	Design Change Notices
DFAR	Department of Defense Acquisition Regulation
DHS	Department of Homeland Security
DID	Data Item Description
DLIS	Defense Logistics Information Service
DLMS	Defense Logistics Management System
DLR	Depot Level Repair
DMIL	Demilitarization Code
DMSI	Decision Memo for Shore Infrastructure

DMSMS	Diminishing Manufacturing Sources and Material Shortages
DMSMSIPT	DSMS Integrated Product Team
DoD	Department of Defense
DoDAAC	Department of Defense Activity Address Code
DOT	Department of Transportation
DPD	Data Product Deliverable
DRIP	Design Review Information Package
DSP	Defense Standardization Program
DT&E	Development Test and Evaluation
DTO	Delivery Task Order
ECP	Engineering Change Proposal
ECPSSR	Engineering Change Proposal System Safety Report
EDFP	Engineering Data for Provisioning
EHCD	Explosive Hazard Classification Data
EIAC	End Item Acronym Code
EIC	Equipment Identification Code
EILSP	Equipment Integrated Logistics Support Plan
ELT	Enforcement of Laws and Treaties
EOD	Explosive Ordnance Disposal
EODD	Explosive Ordnance Disposal Data
EOSS	Engineering Operating Sequence Systems
EP	Execution Proposal
EPSS	Electronic Performance Support Systems
ESEIR	Early Support Equipment Identification Report
ESOH	Environment, Safety, and Occupational Health
ESS	Equipment Support Sheet
FAC	Facilities
FBL	Functional Baseline
FCA	Functional Configuration Audit
FEA	Front End Analysis
FFA	Functional Failure Analysis
FLIS	Federal Logistics Information Systems
FLR	Field Level Repair
FMEA	Failure Modes Effect Analysis
FMECA	Failure Modes Effects and Criticality Analysis
FOC	Full Operating Capability
FRACAS	Failure Reporting and Corrective Action System
FRD	Facilities Requirement Document
FSC	Federal Supply Classification
FSI	Functionally Significant Items
FYHSP	Future Year Homeland Security Plan
GF	Government Furnished
GFE	Government Furnished Equipment

GFM	Government Furnished Material
GIDEP	Government-Industry Data Exchange Program
GUCL	General Use Consumable List
GS	General Schedule
HALT	Handbook of Acquisition Logistics and Templates
HAZMAT	Hazardous Materials
HEPP	Human Engineering Project Plan
HFE	Human Factors Engineering
HH	Health Hazards
HHA	Health Hazard Assessment
HHAR	Health Hazard Assessment Report
HMMP	Hazardous Materials Management Plan
HM&E	Hull, Mechanical, and Electrical
HIS	Human Systems Integration
HSC	Hierarchical Structure Code
HSIP	Human System Integration Plan
IAW	In Accordance With
IBOM	Indentured Bills of Material
ICAPS	Interactive Computer Aided Provisioning System
ICP	Inventory Control Point
ICE	Independent Cost Estimate
ICT	Integrated Concept Team
ICW	Interactive Courseware
IEEE	Institute of Electrical and Electronic Engineers
IEM	Inactive Equipment Maintenance
IETM	Interactive Electronic Technical Manual
ILA	Independent Logistics Assessment
ILS	Integrated Logistics Support
ILSM	Integrated Logistics Support Manager
ILSMT	Integrated Logistics Support Management Team
ILSP	Integrated Logistics Support Plan
INCO	Installation and Check Out
IOC	Initial Operating Capability
IPB	Illustrated Parts Breakdown
IPT	Integrated Product Team
IPC	Indentured Product Code
ISIL	Interim Support Items List
ISIPC	Interim Support Item Provisioning Conference
ISO	International Organization for Standardization
ISP	Integrated Support Plan
ISS	Interim Supply Support
ISSA	Interservice Supply Support Agreements
ISSC	Interim Supply Support Conference

IT	Information Technology
IUID	Item Unique Identification
KO	Contracting Officer
LBS	Pounds
LCC	Life-Cycle Costing
LCCE	Life-Cycle Cost Estimate
LEM	Logistics Element Manager
LLTIL	Long Lead Time Items List
LLTPC	Long Lead Time Provisioning Conference
LMI	Logistics Management Information
LMIDP	Logistics Management Information Data Product
LMIS	Logistics Management Information System
LMISDP	Logistics Management Information Data Product
LORA	Level of Repair Analysis
LPPL	Level Provisioning Parts List
LRIP	Low Rate Initial Production
LRR	Logistics Readiness Reviews
LRU	Line Replaceable Unit
LSA	Logistics Support Analysis
MAC	Maintenance Action Code
MAOT	Maximum Allowable Operating Time
MAP	Manpower and Personnel
MAR	Mission Analysis Report
MB	Measurement Base
MCC	Mission Criticality Code
MDA	Milestone Decision Authority
MECL	Master Equipment Configuration List
MER	Manpower Estimate Report
MHE	Materiel Handling Equipment
MIF	Master Item File
MILSTRIP	Military Standard Requisition and Issue Procedure
MIP	Maintenance Index Page
MLDT	Mean Logistics Delay Time
MNS	Mission Needs Statement
MOE	Measure of Effectiveness
MOS	Measure of Suitability
MOSA	Modular Open Systems Approach
MPA	Maintenance Planning
MPC	Maintenance Procedure Card
MRA	Manpower Requirements Analysis
MRAR	Mishap Risk Assessment Report
MRC	Maintenance Requirement Card
MRF	Maintenance Replacement Factor

MRRI	Maintenance Replacement Rate I
MS	Milestone
MSAM	Major Systems Acquisition Manual
MTBCF	Mean Time Between Critical Failure
MTBF	Mean Time Between Failure
MTTR	Mean Time to Repair
NATO	North Atlantic Treaty Organization
NAVSEA	Naval Sea Systems Command
NBC	Nuclear, Biological, and Chemical
NBIM	National Building Information Model
NASA	National Aeronautics and Space Administration
NDI	Non-Development Item
NEPA	National Environmental Policy Act
NHA	Next Higher Assembly
NHA-IND	Next Higher Assembly Provisioning List Item Sequence Number Indicator
NI	Non-Existing Item
NICN	Navy Item Control Number
NIIN	National Item Identification Number
NLT	Not Later Than
NM ARB	Non-Major Acquisition Review Board
NMAP	Non-Major Acquisition Process
NOR	Notice of Revision
NR	Not New Item
NSN	National Stock Number
ODS	Ozone Depleting Substance
OE	Operating Expenses
OEM	Original Equipment Manufacturer
OGA	Other Government Agency
OJT	On-the-Job Training
OM	Obsolescence Management
OMB	Office of Management and Budget
OM&S	Operating Material and Spares
ORD	Operational Requirements Document
ORR	Operational Readiness Review
OT&E	Operational Test and Evaluation
OSI	Operating Space Item
OSS	Operating Sequence Systems
OTS	Over the Shoulder
OW	One-Way
P3I	Pre-planned Product Improvement
PAL	Preliminary Allowance List
PAT	Preliminary Acceptance Trials

PBL	Product Baseline
PCA	Physical Configuration Audit
PCCN	Provisioning Contract Control Number
PCL	Post Conference List
PDF	Portable Document Format
PDR	Preliminary Design Review
PDS	Project Development Submittal
PEO	Program Executive Officer
PES	Procedure Evaluation Sheet
PESHE	Programmatic Environment, Safety, and Occupational Health Evaluation
PGC	Provisioning Guidance Conference
PHS&T	Packaging, Handling, Storage & Transportation
PIO	Provisioned Item Order
PIR	Post Implementation Review
PISC	Provisioning Item Selection Conference
PL	Parts List
PLC	Program Logic Controller
PLISN	Provisioning List Item Sequence Number
PLM	Product Line Managers
PLT	Production Lead Time
PM	Project Manager
PMIC	Precious Metal Indicator Code
PMP	Project Management Plan
PMS	Planned Maintenance System
PMT	Parts Management
PN	Part Number
POAM	Plan of Action and Milestones
POP	Performance Oriented Packaging
PP	Planning Proposal
PPL	Provisioning Parts List
PPLI	Provisioning Parts List Item
PP&P	Preservation, Packaging and Packing
PPR	Project Proposal Report
PPS	Provisioning Performance Schedule
PPSL	Program Parts Selection List
PRC	Packaging Requirement Code
PRIME	Plastics Removal in Marine Environment
PRO	Project Resident Office
PRR	Production Readiness Review
PS	Problem Statement
PSI	Pounds per Square Inch
PS&T	Performance Support & Training

PTD	Provisioning Technical Data
PTDSS	Provisioning Technical Documentation Submission Schedules
PTP	Project Transition Plan
QMS	Quality Management System
QPA	Quantity Per Assembly
QPEI	Quantity Per End Item
QPPC	Quarterly Production Progress Conference
QUA	Quality Assurance
RAM	Reliability, Availability & Maintainability
RCM	Reliability Centered Maintenance
RF	Replacement Factor
RFD	Request for Deviation
RFP	Request for Proposal
RHCP	Radiation Hazard Control Procedure
RIC	Repairable Identification Code
RIL	Repairable Items List
RP	Review Point
RP-3	Review Point 3
RPT	Resident Provisioning Team
RRR	Rework Removal Rate
RS/IND	Replaced or Superseding Provisioning List Item Sequence Number Indicator
SAIP	Spares Acquisition Integrated with Production
SAPP	Supportability Analysis Program Plan
SAR	Standardization Accomplishment Report
SCAT	Sub-Category Code
SCD	Specification Control Drawing
SCOM	Software Center Operator Manual
SCPL	System Configuration Provisioning List
SDD	Software Design Description
SDP	Software Development Plan
SDSA	Software Design and Safety Analysis
SDSR	Software Development Status Report
SEID	Support Equipment Installation Data
SEIPT	Support Equipment Integrated Product Team
SELC	Systems Engineering Life Cycle
SEMP	Systems Engineering Management Plan
SEP	System Engineering Plan
SERD	Support Equipment Recommendation Data
SFCAM	Shore Facility Capital Asset Management
SFLC	Surface Forces Logistics Center
SFPDM	Shore Facility Project Development Manual
SILS	System Integrated Logistics Support

SIP	Software Installation Plan
SISA	Software Implementation and Safety Analysis
SL	Shelf Life
SLAC	Shelf Life Action Code
SLPPL	System Level Provisioning Part List
SMCC	Special Material Content Code
SME	Subject Matter Expert
SMIC	Special Maintenance Item Code
SMP	Software Maintenance Plan
SM&R	Source, Maintenance and Recoverability
SN	Serial Number
SOA	Start of Availability
SOP	Standard Operating Procedure
SOW	Statement of Work
SPI	Special Packaging Instruction
SPP	Standardization Program Plan
SPPM	Supply Policies and Procedures Manual
SPS	Statements of Prior Submission
SPTD	Supplementary Provisioning Technical Documentation
SQAP	Software Quality Assurance Plan
SRA	Shop Replaceable Assembly
SRDR	Software Resource Data Reporting
SRI	Storeroom Item
SRS	Software Requirement Specification
SRU	Shop Replaceable Unit
SS	Supply Support
SSA	Software Support Activity
SSEB	Source Selection Evaluation Board
SSHA	System Safety Hazard Analysis
SSHAR	System Safety Hazard Analysis Report
SSP	System Safety Program
SSPP	System Safety Program Plan
SSPPR	System Safety Program Progress Report
SSR	Safety Studies Report
SSRA	Software Safety Requirements and Analysis
SSv	Personnel Survivability
S&TE	Support and Test Equipment
STD	Standardization
STP	Software Test Plan
STR	Software Test Report
STSA	Software Test and Safety Analysis
SUA	Supportability Analysis
SUE	Support Equipment

SUM	Software User Manual
SUS	Supply Support
SVD	Software Version Description
SYE	Systems Engineering
SyRS	Systems Requirement Specification
SYS	Systems Safety
TDP	Technical Data Package
T&E	Test and Evaluation
TEMP	Test and Evaluation Master Plan
TEPP	Test and Evaluation Program Plan
TFR	Trainer Facilities Report
TIC	Total Item Change
TMDE	Test, Measurement, and Diagnostic Equipment
TOC	Total Ownership Cost
TOCC	Type of Change Code
TRAYSYS	Training System
TRF	Technical Replacement Factor
TRS	Technical Repair Standard
TTE	Training and Training Equipment
TTEL	Tools and Test Equipment
TW	Two-Way
UI	Unit of Issue
UII	Unique Item Identifier
USCG	United States Coast Guard
U.S.C.	United States Code
VCG	Vice Commandant Coast Guard
VDD	Version Description Document
WBS	Work Breakdown Structure
WDSSR	Waiver or Deviation System Safety Report
WRA	Weapons Replaceable Assembly