

APPENDIX C

PROCEDURES AND IMPLEMENTING GUIDANCE

SECTION I. PREFACE

An Information System (IS) is supported by two types of documentation --managerial and technical. The managerial portion is referred to as the Life Cycle Management (LCM) documentation, and is similar to project management (PM) documentation in other disciplines. This appendix primarily addresses the LCM documentation requirements. *LCM documentation can be significantly tailored for IS under the ACAT IV approval authority of USACE.*

The second type of documentation for an IS is the technical documentation. This technical documentation is based on MIL-STD-498 with its Data Item Descriptions (DIDs). DIDs can range from operations manual development to interface requirement specifications.

SECTION II. TAILORING

One of the main purposes of LCM is to define a standardized process for managing the development and subsequent operation of an IS. An IS has various formal phases and milestones. Each of these phases contains key *planning* and *evaluation* considerations, as well as *exit criteria* that must be met before the next phase can be entered.

The formal, five phase LCM approach is targeted at the larger IS development efforts which require extensive planning in a wide variety of both management and technical considerations. For such large development efforts, it is not possible to define all the events and tasks that need to be addressed at any one point in the system's life. The phased approach, therefore, is usually a linear progression which allows each phase to build upon the new or refined information obtained in a previous phase.

For the majority of IS within USACE (ACAT IV primarily), the concept of tailoring allows for the modification of the formal five phased process, based on the specific requirements of the IS project being developed or modified. Actions permitted by tailoring are: combining milestones; rapid prototyping; phased development; phased deployment; and, the reduction of documentation required to reach each milestone decision. However, certain portions of the phased process may *not* be compromised by the tailoring concept. The Mission Need Justification Phase (prior to Milestone 0) and the Concept Exploration and Definition Phase (prior to Milestone I) may not be combined with each other and must be completed in their entirety. Testing of the system must be completed prior to requesting a Milestone III production decision. Milestone III approval must be obtained prior to deployment of the IS.

In all cases, the applicable MDA must formally approve, in writing, the tailoring concept to be used. This tailoring approval must be given *prior* to obtaining Milestone I approval. (*See Section III for a more detailed discussion of phases and milestones.*)

SECTION III. LCM PHASES and MILESTONES

A. FUNCTIONAL PROCESS IMPROVEMENT

Life cycle management of an IS --particularly, a major modernization effort, must be preceded by an evaluation of the functional business area. *This is a critical first step.* Through streamlining and elimination of non-value added activities, this analysis can be used to change the way missions and functions are accomplished, i.e., the "as is" and "to be" worlds. The results of this process build a business case for development, redesign, or modernization of an individual IS. Functional Proponents, that is, business process owners, are accountable for ensuring business process analysis and revision, as appropriate, for any anticipated information technology (IT)/Information System (IS) investment of \$2M or more in a fiscal year, or \$30M or more in total life cycle costs.

B. MISSION NEED JUSTIFICATION

The LCM process begins with a justification of the mission need --a statement of why the organization needs to expend resources to develop, deploy, and operate the proposed IS. This is one of the most often neglected, yet one of the more crucial of all phases. *The Mission Need Justification formally starts the life cycle of an IS.* During this process the functional user defines and documents a mission need and validates that need, such as an opportunity to improve mission performance.

The Mission Needs Justification Phase ends, if, during the discovery process, the Functional Proponent determines that IS development or major modification is not required for one or more of the following reasons:

- The need can be satisfied by a streamlined or improved manual process.
- The need can be accommodated through an existing IS.
- A new/modified IS is not cost-effective.

This phase is intended to primarily focus on functional business requirements, without specifically addressing technical solutions. However, it may be determined early in the process that a Commercial Off-the-Shelf (COTS) package (software and/or hardware) fully satisfied the required functional application. This approach would eliminate the need (and the cost) to develop custom software for the application. However, even if COTS products --whether

modified or not, satisfy the requirements, the Mission Need Justification phase investigation will still have to be performed, although some of the steps may be abbreviated. That investigation is formally documented through a Mission Need Statement (MNS) document. MNS contents are addressed in the following table, *and can be tailored*.

The MNS is presented by the Functional Proponent to the MDA for approval. The FP is then authorized to initiate the Concept Exploration and Definition Phase to expend resources for activities of that phase *after* MNS approval. *This is also the appropriate time to enter the planned IS and related data into the USACE Information Technology Investment Portfolio System (ITIPS)*. The ITIPS data should be updated as the IS proceeds through its various phases.

MISSION NEED STATEMENT (MNS) CONTENTS

Element	Description
Mission Area	Describe the purpose, scope and specific applicability of the Mission Need Statement (MNS) for the proposed AIS, including its relationship to the Corps business area or activity it is intended to support. Identify specific references or requirements for meeting the mission need, such as DoD directives/guidance publications, DA regulations and policies, and Corps planning documents (e.g., IMA Planning Guidance).
Mission Environment	Describe the applicable Corps business area or activity's current organization and operational environment, with emphasis on existing business processes. This should include a concept of operation of the existing business processes, procedures, and capabilities. Describe any cooperative opportunities, such as a program addressing a similar need in other MACOMs, military services, DoD agencies, or other Federal departments.
Mission Need	<p>Describe the procedures for assessing existing business processes to identify opportunities for improvement with emphasis on business process reengineering and evaluation activities, including as a minimum:</p> <ul style="list-style-type: none"> • Description of how business processes are currently being done and how these processes might be improved; • Relation of identified mission need to current IM strategic plans, implementing strategies, and business area direction; • Identification of proposed business process improvement in order of priority; • System location(s) and general schedule for implementation of where the functionality will be deployed; • Identification of the planned mode of operation, classification level(s), and level of assurance required for the system.
Mission Deficiencies	Describe existing deficiencies, and the methods used to validate and prioritize deficiencies.
Impact of Deficiencies on the Mission	Describe the impacts on mission performance of not correcting existing deficiencies. Describe how proposed improvements will enhance current operations and increase user satisfaction.
Migration Planning Process	Describe how the mission need relates to the Corps migration planning strategy.

Element	Description
Security, Interface and Interoperability Requirements	Describe the anticipated security, systems interface(s), and interoperability requirements.
Projected Functional Benefits	Describe the projected functional benefits of implementing the need versus keeping the status quo.
Return-On-Investment (ROI)	Provide an expected return-on-investment associated with the proposed functional improvement.
Constraints and Assumptions Impacting Alternatives	Describe any functional, technical and financial constraints and assumption that could impact the acquisition, operations and logistics; mobility; effectiveness; survivability; and continuity of operations.
Resources	Describe all funding requirements.

C. PHASE 0 - CONCEPT EXPLORATION AND DEFINITION PHASE

The overall goal of Phase 0 is the development of a valid and optimized system concept that supports the required business process(es) and defines alternative functional and technical solutions for supporting those processes. These alternatives must be mission supportive and exhibit favorable cost benefit ratios. Phase 0 organizes the activities associated with IS development effort into *managerial* and *technical* considerations.

Here are some of the activities associated with Phase 0:

MANAGERIAL CONSIDERATIONS	TECHNICAL CONSIDERATIONS
<p>Appoint a Systems Manager (SM) and an Integrated Product Team (IPT).</p> <ul style="list-style-type: none"> ● Develop initial System Decision Paper (SDP). <u>See Section IV for SDP format.</u> ● Refine and prioritize functional requirements for proposed IS. Activity and data modeling are useful tools for this purpose. ● Perform financial analysis for selected IS option(s). ● Determine Demonstration and Validation objectives and criteria. ● Obtain MDA approval to proceed to Phase I. 	<ul style="list-style-type: none"> ● Assess universe of potential technical solutions, e.g., other IS, data/software reuse, etc. ● Select program strategy, e.g., Grand Design, Incremental, Evolutionary. ● Select acquisition strategy, e.g., build versus buy. ● Identify additional technical factors, e.g., security and internal controls, data management, configuration management, electronic recordkeeping, and interoperability and interface requirements.

The SDP is presented by the Functional Proponent to the MDA for approval. Based on this approval, the FP is then authorized to proceed into the Demonstration and Validation Phase I. The following table is representative of the exit criteria that must be satisfied to demonstrate that Phase 0 has been completed. Phase 0, Concept Exploration and Demonstration, is a *transitional* phase between the identification of a mission need and the execution of specific steps taken to satisfy that need.

Exit Criteria	Status
1. Identification and prioritization of functional requirements.	
2. Assessment of alternative functional concepts for performing needed mission activities, including modernization of the business methods. Activity and data models used.	
3. Assessment of alternative technical concepts and architectures that could satisfy the required needs, including reuse of existing software and data assets.	
4. Selection of best program strategy to satisfy the mission need, based on the results of combining the evaluation of functional and technical alternatives with other key program factors (e.g., acquisition strategy, development approach, etc.) and their related risks, costs, and benefits.	
5. Evaluation, selection, and approval of the appropriate program acquisition strategy to implement the selected program concept.	
6. Initial planning for the design, development, testing, deployment, configuration management, maintenance, and technology refreshment of the proposed AIS.	
7. Creation of an initial risk area analysis, including definition of risk reduction measures, management approaches and plans.	
8. Development of the AIS Operational Concept Description, to the extent possible, given the selected program concept.	
9. Consistency between the proposed program concept and the organization's strategic plans and mission statements.	
10. Definition of the activities to occur for the program concept demonstration(s) and the criteria to evaluate the demonstration(s). The demonstration program(s) will be designed, coded, tested and implemented to provide basic, or elementary, capabilities across the full range of requirements.	
11. Appointment of a Project Manager (PM) and Systems Manager (SM) by the Functional Proponent (FP), and approval of the PM's/SM's Charter(s).	
12. Creation of a preliminary IS life cycle financial analysis in support of the AIS performance and recommended overall program approach.	
13. Presentation of the SDP/ASDP for MDA approval.	

D. PHASE I - DEMONSTRATION AND VALIDATION PHASE

The IS life cycle process uses this phase to demonstrate/validate candidate technological concepts, including non-development solutions such as COTS. This phase is a crucial step in the LCM process, for this is when the PM, supporting staff and partnering organizations, establish the basis and rationale for migrating from documented requirements and concepts to actual development and implementation of the IS. From this phase, the *best* program concept is selected.

DEMONSTRATION and VALIDATION PHASE ACTIVITIES
<ul style="list-style-type: none">• Develop Demonstration and Validation requirements, depending on the selected program strategy, e.g., Grand Design, Incremental, or Evolutionary.• Identify environmental constraints, i.e., corporate computing infrastructure, and risk areas, i.e., new platforms, network, software availability, etc.• Identify prototyping considerations.• Develop a test/demonstration approach, e.g., the Test and Evaluation Master Plan.• Develop the prototype application.• Conduct tests and demonstrations.• Collect and evaluate demonstration/test data.• Document IS Development Phase requirements.

An *updated SDP* and *updated financial analysis* is presented by the Functional Proponent to the MDA for approval. **See Section IV for a more detailed discussion of the SDP and financial analysis documentation requirements.** Based on this approval, the FP is then authorized to proceed into the Development Phase II.

E. PHASE II - DEVELOPMENT PHASE

The development phase is the LCM segment used to complete code generation and successfully conduct system tests and evaluation of the IS configuration to be initially produced for operational use. Depending upon the program strategy selected, e.g., Grand Design, Incremental, Evolutionary, aspects of development and demonstration/validation may be combined, and the entire process may be *iterative* in nature. During this phase the FP and PM must prepare for IS deployment. This activity includes the conduct of a number of pre-deployment activities, such as preparation of deployment and training plans, and determination of the appropriate Post Deployment Software Support (PDSS) strategy for the upcoming Operations and Support Phase.

DEVELOPMENT PHASE ACTIVITIES

- Perform software development, including generation and integration of code. This takes into consideration software engineering, software metrics, interface, integration and bridging requirements, security, data integration, electronic records management, and the Joint Technical Architecture-Army (JTA-A), including USACE extensions.
- Conduct software level, system level, and user level testing.
- Review and approve test results.
- Modify/convert legacy systems, as appropriate.
- Prepare IS documentation.
- Plan IS deployment and transition into the Operations and Support Phase.
- Plan IS training.

Again, an *updated SDP* and *updated Financial analysis* is presented by the Functional Proponent to the MDA for approval to deploy. **See Section IV for a more detailed discussion of the SDP and financial analysis documentation requirements.** The MDA is looking for verification that operational testing has been completed with validation that the IS supports functional requirements and is ready for deployment. Based on the MDA approval, the FP is then authorized to proceed into the Production and Deployment Phase III.

F. PHASE III - PRODUCTION AND DEPLOYMENT PHASE

The purpose of this phase is to complete the deployment of the IS in accordance with the approved program plan. The Production and Deployment Phase marks the end of the development, testing, and acceptance phases of either the IS, a module, or an increment. Unlike the preceding phases, this phase does not require a formal MDA review. The Production and Deployment Phase does require significant planning and skillful coordination between all affected parties. However, *management reviews* become important to ensure that scheduled activities are being executed on time and that problems and issues are being recognized, and resolved in a timely manner.

PRODUCTION AND DEPLOYMENT PHASE ACTIVITIES

- The production process, e.g., IS delivery, installation, and checkout.
- Site preparation and infrastructure assessment, e.g., adequate space, security preparations, sufficient network communications, workstation upgrades, etc.
- Training and staffing.
- Operational assessment, i.e., collecting and evaluating IS benefits, and resource planning.
- Post Deployment Software Support (PDSS) Plan, including development of a detailed Software Support Plan (SSP).
- Preparation of a Continuity of Operations Plan (COOP).

Both the **SDP** and **financial analysis** need to be updated by the Functional Proponent, in preparation for a Milestone IV Operations and Support Phase MDA review and approval. See Section IV for a more detailed discussion of the SDP and financial analysis documentation requirements. The MDA considers the post-deployment IS operational assessment and validates that the mission need is being satisfied, operational support of the IS is acceptable, and that IS affordability, performance, and benefits are within acceptable limits. Based on the MDA approval, the FP is then authorized to proceed into the Operations and Support Phase IV.

G. PHASE IV - OPERATIONS AND SUPPORT PHASE

The implementation of IS life cycle management culminates in the Operations and Support Phase. This phase is where the shift to Post Deployment Software Support (PDSS) occurs, the IS or IS increments are continuously evaluated for effectiveness, and plans are undertaken for modernization of the IS or IS increments.

OPERATIONS AND SUPPORT PHASE ACTIVITIES

- Provide continuous, efficient and cost effective operation of the IS, including archiving, back-up, and electronic records disposition functions.
- Control changes to the IS configuration (configuration management), performance capabilities, interfaces, operation and training materials, and requirements documentation.
- Provide continuous monitoring and evaluation of IS performance, and factors affecting that performance.
- Enhance IS performance in response to user requests and technology opportunities within approved LCM cost parameters.
- Provide sustainment training to IS users and support staff.
- Maintain the IS hardware and software.
- Provide IS administration functions, e.g., budgeting, security controls, scheduling, reporting, planning, etc.

The Operations and Support Phase begins when the production version of the IS is deployed to the *first* user site, and the IS enters into maintenance. This phase ends when there is a management decision to dispose of the IS, or when the IS is completely replaced. A decision to perform major modernization generally requires a *return* to the Milestone I point in the LCM process, to initiate the Concept Exploration and Development Phase 0 level of activity. Milestone IV reviews will be conducted by the MDA no later than four years after Milestone III approval and every three years thereafter, or as required when other significant changes, e.g., mission, policy, legal requirements, etc., necessitate.

SECTION IV. SYSTEMS DECISION PAPER (SDP) AND ECONOMIC ANALYSIS (EA) FOR ACAT IV INFORMATION SYSTEMS

A. ACAT IV SDP DOCUMENTATION.

The SDP consolidates and presents essential information for evaluating the quality and completeness of IS program planning products and progress against approved plans. The Functional Proponent is responsible for updating the SDP during each LCM phase. The SDP is the primary document supporting LCM milestone reviews and approvals. The SDP may be viewed as a comprehensive management level summation of the program as a decision paper. *The SDP can also be tailored with the agreement of the MDA.* The SDP format follows as paragraph C.

B. ACAT IV INFORMATION SYSTEM (IS) PLANNING, PROGRAMMING, BUDGETING, and EXECUTION SYSTEM (PPBES).

There are several important resource management aspects of an IS.

1. PLANNING. Beginning with planning for an IS, and continuing throughout an IS life cycle, IS program and cost information will be tracked through the USACE Information Technology Investment Portfolio System (ITIPS). The details of what is to be included in ITIPS is published by the Directorate of Information Management under separate HQUSACE memoranda. ITIPS serves as a Command IS/IT inventory, as well as forming the basis of IS/IT portfolio management by the Chief Information Officer (CIO). ITIPS supports the IT capital planning and investment decision process which provides consistent decision criteria to make comparisons of costs, benefits, risks, and returns across IT project/program proposals, as well as providing Corps senior executives with the performance measurements needed to take action to continue, modify, or cancel specific IS. *In terms of individual IS, ITIPS will serve as the basis for budget allocation decisions.*

2. FINANCIAL ANALYSIS. Milestone decisions for a specific IS are based, in part, on a financial analysis. Placed in context, financial analysis can be seen as a *complement* to the functional and technical evaluations which are also integral parts of the LCM process. The financial analysis supports the evaluation of alternative investment decisions based on cost considerations. *The financial analysis gets updated as an IS proceeds through each life cycle decision point.*

Summary information is reported as part of the Abbreviated Systems Decision Paper (SDP) documentation (see Section IV C, ACAT IV SDP Format).

Regardless of their relative levels of complexity, all forms of financial analysis incorporate common elements. These steps include: 1) defining an objective, 2) formulating assumptions and constraints, 3) identifying alternatives, 4) determining costs and benefits, and interfacing costs and benefits for each alternative, 5) comparing alternatives, 6) performing sensitivity analysis, and 7) reporting results and recommendations.

From simplest to the more sophisticated, the three types of financial analysis are: *Cost Analysis*, *Cost Benefit Analysis*, and *Economic Analysis*. The higher the likely costs of a proposed IS, the more extensive is the financial analysis.

3. PROGRAMMING AND BUDGETING. The Functional Proponent (FP) has the primary responsibility for funding costs associated with *each* IS life cycle phase.

A. Funding Sources. The FP will program and budget for all costs through each LCM phase using either of the following funding sources:

(1) If the total program costs exceed \$25,000 and the IS meets all other Plant Replacement and Improvement Program (PRIP) criteria, the costs can be programmed and budgeted through the PRIP. However, PRIP funding should be pursued only if the IS can be shown to directly support specific projects. [See ER 1130-2-500 and ER 37-2-10]. The PRIP budget submittal will show the allocation of payback charges to each benefitting project, program or activity. The allocation will be based on the projected usage of the IS by each targeted activity.

(2) An IS not utilizing PRIP funds will be funded against the appropriation(s) funding from the project/program/activity that will benefit from the IS. The allocation among project/program/activities will be based on the projected usage of the IS by each entity. This method of funding could also include programming and budgeting against a single direct appropriation, e.g., General Investigations or Military Construction, Army, to pay all costs.

(3) The FP will also budget for all approved changes to data, database tables, data definitions, data structures, data models, and business rules for the IS, as well as for the changes that have to be made in any other IS which is impacted by the proposed change and for which the proponent of the impacted IS is USACE. Impacts to IS outside of the jurisdiction of HQUSACE will be handled individually based on written agreements or memoranda of understanding. To the extent that these changes qualify as enhancements to previous, PRIP-funded packages, the value of these changes will be programmed and budgeted through PRIP; otherwise, the cost of these changes will be included in Operations and Maintenance costs.

B. Cost Recovery. Cost recovery is necessary to recoup expenses associated with activities such as IS program and project management; adding new IS functionality; integrating an IS with other

Command IS; IS operations and maintenance; supporting customer hot lines/help desk; performing capacity and technical testing for major system releases; and payback of capitalized charges (PRIP).

Costs are recovered via fee for service when multiple organizations or appropriations are involved, either through a fee-for-service [preferred option] based on actual usage (metered) or a site license. When the IS is associated with a single user and/or a single appropriation, the cost will be charged to the user's operating account or the associated appropriation. Fee-for-service is collected as follows:

(1) Fee-for-Service (metered). Fee-for-Service is a charge to a user of an IS based on actual metered usage. The charge for the session consists of the costs to use the CEAP-IA processing resources, plus the IS rate developed by HQUSACE Deputy Chief of Staff for Resource Management. The rate for use of the CEAP-IA processing resources is also developed corporately and reviewed annually. The IS rate is developed based on the total IS operations and maintenance costs divided by the expected processing resources to be used during a given year. If historical usage data is not available, then a best estimate will be established before the beginning of the fiscal year. The HQUSACE Directorate of Information Management is responsible for processing the automated bills for this service; the HQ Finance Office (HECSA) is responsible for receiving payments and maintaining accounting records.

(2) A site license will be used when fee-for-service cost recovery cannot be applied through metered usage. Normally, the license would be issued for user software and services that are not dependent, or do not reside, on a central platform such as CEAP-IA, e.g., proprietary LAN and PC-based systems. The site license can be viewed similarly as a "subscription fee" ---a one-time annual flat charge and calculated by dividing the total annual IS costs by the number of "subscribers." Who or what is a subscriber is defined by the FP, but, it will be a fixed number, such as number of districts, number of users, etc. The FP will provide the HQUSACE Deputy Chief of Staff for Resource Management with a breakout of total subscribers and cost for subscription by June 1 preceding the targeted fiscal year.

C. Cost Accounting. IS cost accounting/tracking will be done through the Corps of Engineers Financial Management System (CEFMS) in accordance with guidelines jointly established by the HQUSACE Deputy Chief of Staff for Resource Management and Directorate of Information Management.

C. ACAT IV SYSTEMS DECISION PAPER (SDP) FORMAT.

The following is the suggested SDP format:

I. SDP Transmittal Memorandum	
SDP SECTION	Notes
<p>II. Synopsis</p> <p>a. Functional Proponent (FP)</p> <p>b. Project Name</p> <p>c. ACAT CATegory and Milestone</p> <p>d. Systems Manager (SM)</p> <p>e. Business Process Analysis</p> <p>f. Mission Need</p> <p>g. Mission Performance</p>	<p>Include project acronym.</p> <p>Specify the ACAT CATegory and milestone to be considered by the Milestone Decision Authority (MDA). Provide a synopsis of previous Milestone time lines and MDA approval dates/exit criteria.</p> <p>Specify SM by name and organization. If MOAs/MOUs have been develop, provide brief description.</p> <p>Describe the business process analysis (Improvement/Reengineering) efforts which lead up to this IS requirement.</p> <p>Describe the purpose, scope, and specific applicability of the proposed IS and its relationship to the USACE business area(s) which it is intended to support.</p> <p>Describe how this IS investment will enhance the performance of the business process and how this investment will contribute to improvement in mission performance. Planned performance measurements should also be discussed.</p>

SDP SECTION	Notes
<p>III. Project Concept</p> <p>a. Project Management.</p> <p>b. Developmental Strategy</p> <p>c. Acquisition Strategy</p> <p>d. Describe the target users of this IS.</p>	<p>Describe the management concept and approach, including a discussion of the Integrated Product Team (IPT).</p> <p>Describe the IS developmental strategy, e.g., Grand Design, Incremental, Evolutionary, etc.</p> <p>Describe the IS acquisition strategy, e.g., build versus buy, and contract vehicles to be used.</p> <p>Discuss in terms of number of users and their organizational placement.</p>
<p>IV. Resource Management</p> <p>a. Has this IS been entered into the USACE Information Technology Investment Portfolio System (ITIPS)?</p> <p>b. IS Life Cycle Cost Summary, including a summary of both quantifiable benefits (e.g., cost savings, productivity improvement savings, etc.) and/or non-quantifiable benefits (e.g., employee morale, public image, etc.)</p> <p>c. What are the IS funding sources and basis of cost recovery?</p>	<p>Yes or No. If Yes, date last updated in ITIPS.</p> <p>Summarize the projected IS life cycle costs, based on a budget analysis, cost benefit analysis, or economic analysis. Provide date which analysis was done.</p> <p>Describe sources of funds (e.g., Civil Works, R&D, Military Programs, Reimbursable, PRIP, etc.) used to support IS through its various life cycle phases. Also discuss basis of cost recovery (e.g., fee-for-service, site licenses, etc.)</p>

SPD SECTION	NOTES
<p>V. Technical Considerations</p> <p>a. Joint Technical Architecture – Army (JTA–A) and USACE extensions.</p> <p>b. Interoperability, Interface, and Integration Considerations.</p> <p>c. Demonstration Requirements.</p> <p>d. Year 2000 compliance.</p> <p>e. Electronic Record Keeping Plan.</p> <p>f. Configuration Management Plan.</p> <p>g. Data Management Plan.</p>	<p>Describe the IS general architecture, e.g., required client–server platforms, web based, technical standards such as DBMS, COTS/GOTS products, communications requirements, etc.</p> <p>As specifically as possible, describe the IS interfacing, integration, and bridging requirements of the proposed IS with other information systems.</p> <p>Describe technical concepts to be used for demonstration and validation and/or prototyping. Describe risk(s) which demonstration is intended to explore and test plan.</p> <p>Is the IS Year 2000 compliant?</p> <p>Describe IS records management requirements, including on–line and off–line records retention, and how information integrity will be assured.</p> <p>Describe the IS configuration management process, including managing the Engineering Change Proposal (ECP) Process.</p> <p>Describe planned testing and evaluation by LCM phases, including application of software metrics.</p> <p>Describe approach to data management (e.g., archiving data, data security, data conversion, use of the Command Data Model (CDM), etc.). Include specific requirements for data sharing and data integration.</p>

SPD SECTION	Notes
<p>h. Testing and Evaluation Master Plan.</p> <p>i. Internal Controls and Security.</p> <p>j. Post Deployment Software Support (PDSS) Plan.</p> <p>k. IS Technical Documentation.</p> <p>l. Other.</p>	<p>Describe the testing strategy and evaluation requirements during the IS life cycle, e.g., software testing, system level testing, user level testing, etc.</p> <p>Describe both IS security and internal control requirements.</p> <p>Describe the IS PDSS plan in terms of project management, data management, applications management, and hardware and systems software management.</p> <p>Describe the availability and depth of the IS technical documentation following MIL-STD-498 guidelines.</p>
<p>VI. Signatures and Approvals</p> <p>a. Typed Name, Signature of IS Functional Proponent and date signed.</p> <p>b. Typed Name and Signature of Milestone Decision Authority (MDA). Should also be dated.</p> <p>c. MDA Approved/Disapproved Statement.</p>	<p>Includes any guidance or specific exit criteria.</p>