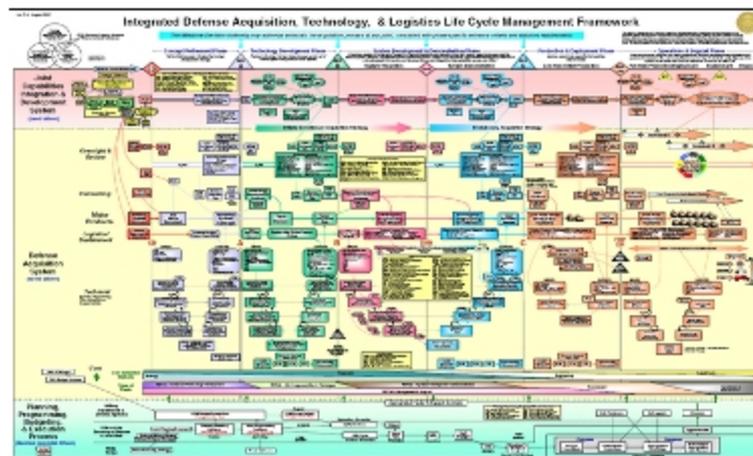


## Welcome to Product Support Plan

This module introduces the role of the Life Cycle Logistician (LCL) in conducting Product Support Planning and developing the resultant Product Support Plan. The Product Support Plan has various different names in the Department of Defense, but the Defense Acquisition Guide has titled it "Life Cycle Sustainment Plan (LCSP)". The LCSP is an iterative document that will be updated throughout the Acquisition Process; the formal LCSP is updated and expanded in the Engineering and Manufacturing Development (EMD) phase .

Select the Play button to listen to a message from the Program Manager.



Select the image to access the interactive wall chart website.



## Closed Captioning

**Program Manager:** I thought that on the occasion of our successful Milestone B review it would be a good time for me as the Program Manager to get together with the Strike Talon Logistics Team. Your input to the CDD, especially on the sustainment Key Performance Parameter and Key System Attributes will provide a framework for the product support attributes necessary to finalize the design of Strike Talon and establish the acquisition program baseline by identifying the cost, schedule and performance constraints we will be under.

The favorable Milestone B decision has officially designated Strike Talon as a formal acquisition program. We now enter the Engineering and Manufacturing Development phase which consists of two efforts (Integrated System Design and System Capability & Manufacturing Process Demonstration). The purpose of EMD is to develop a system or increment of capability; complete full system Integration, develop affordable and executable manufacturing process; ensure operational supportability; reduce logistics footprint; implement human systems integration; design for producibility; ensure affordability protect critical program Information; and demonstrate system integration, interoperability, safety and utility. The first effort in this phase is Integrated Systems Design. The purpose of the Integrated System Design effort will be to define Strike Talon's System of System Functionality and Interfaces, Complete Detailed Design, complete System Level Preliminary Design review (as needed)/Critical Design Review, and establish the Product Baseline.

The Logistics team has big challenge during the Integrated System Design effort of the EMD phase. You will need to document Strike Talon's Product Support Strategy in the Life Cycle Sustainment Plan. I know a lot of your previous efforts, especially in the areas of reliability, maintainability and supportability, will culminate in this comprehensive logistics support strategy.

As you know, product support is defined as a package of logistics support functions necessary to maintain the readiness and operational capability of a system. It is an integral part of the weapons system support strategy, which is part of the overall acquisition strategy.

Once you have identified the logistics support functions necessary, you then have to develop a strategy on how to accomplish it. The Product Support Strategy addresses life cycle sustainment and continuous

improvement product affordability, reliability, and supportability all while maintaining and sustaining readiness. It ensures that system support and life cycle affordability considerations are addressed and documented.

The Product Support Package identifies "What needs to be done", The Product Support Strategy identifies "How it needs to be done", "Who needs to do it?", "When does it need to be done?" and "Why it needs to be done".

The Life Cycle Sustainment Plan is the formal document that takes the answers from What, How, Who, When, and Why and integrates them together into a comprehensive plan that will document how the sustainment strategy is being implemented.

You definitely have your work cut out for you. Fortunately there are number of established support and engineering activities that you will complete with the folks over in Systems Engineering to provide the data you will need to develop the Strike Talon Life Cycle Sustainment Plan.

Under the Life Cycle Management construct, as Program Manager, I am the single point of accountability for accomplishing program objectives. My two goals in regards to product support are, first, Strike Talon will be designed and maintained with an emphasis on reducing the demand for logistics, and two, logistics support must be effective and efficient, that is, the resources required to provide logistics will be minimized while meeting the warfighter's requirements. To accomplish this, the product support plan must take a performance-based approach. Product support requirements must be generated as performance conditions not in the traditional approach of buying individual parts or repair actions. This is accomplished through business relationships that are structured to meet the warfighter's operational needs and align support objectives with required performance outcomes and available resources.

The Strike Talon logistics team has done a great job up to this point in defining the supportability objectives, evaluating product support capabilities and developing the initial product support strategy. But this is where the proverbial rubber meets the road. Your work on conducting the life cycle sustainment planning and developing the Life Cycle Sustainment Plan will determine whether or not Strike Talon will meet its supportability goals in an operational environment.

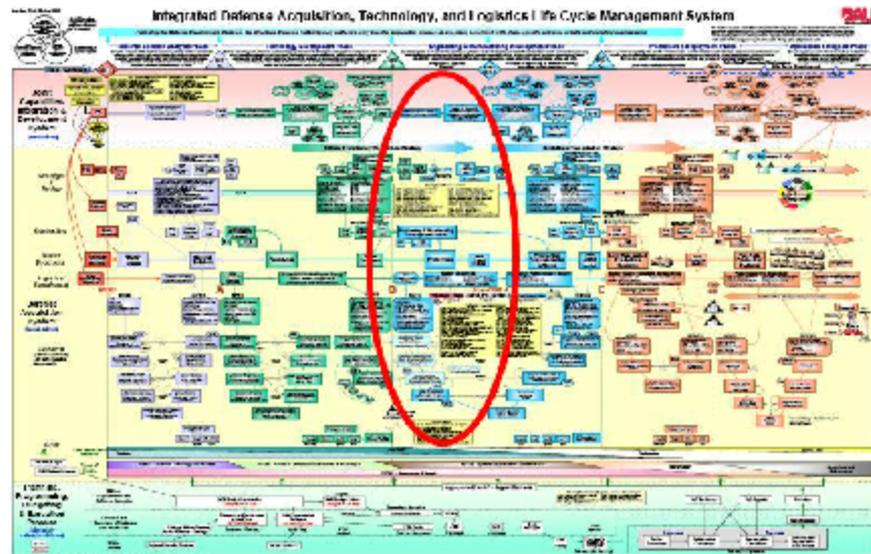
Good luck.

## Why Develop a Life Cycle Sustainment Plan

The Life Cycle Sustainment Plan (LCSP) is a living document where the genesis for its elements exists in the earlier phases of the acquisition life cycle. The expanded and updated LCSP is an output of the System Capability & Manufacturing Process Demonstration effort of the Engineering and Manufacturing Development (EMD) phase. However, during the Integrated System Design (ISD) effort of EMD, the [Critical Design Review](#) (CDR) is completed which allows for in-depth translation of the Product Support Strategy into the LCSP.

During the ISD effort, the LCL participates in the following activities:

- Analysis of the input documents with the focus being to update the LCSP as one part of the exit criteria for the EMD phase.
- Define logistics support for evolutionary acquisition (where employed)
- Implement human systems integration (HSI)
- Define support-related performance criteria for planned testing and modeling and simulation
- Conduct reliability and maintainability prediction and analyses
- Refine logistics support considerations for openness of design, upgradeability, testability, and commercial technology insertion.



D

## **Popup Text**

### **Critical Design Review**

The Critical Design Review is a multi-disciplined technical review establishing the initial product baseline to ensure that the system under review has a reasonable expectation of satisfying the requirements of the Capability Development Document within the current allocated budget and schedule. The Defense Acquisition Guidebook (<http://akss.dau.mil/dag/>) chapter 4 (para 4.3.3.4.2) provides further details concerning the requirements of the CDR.

### **Long Description**

This image is an animation of the wall chart. The animation enlarges the portion of the chart that involves the process of the Integrated System Design effort of the Engineering and Manufacturing Development phase.

## Outputs

The major outputs of the ISD effort during EMD are dependent upon whether or not the Preliminary Design Review (PDR) was completed prior to MS B. If the PDR was completed prior to MS B, then the output of the ISD effort of EMD is the CDR. If the PDR was not completed, then the outputs are the:

- System Functional Review (SFR)
- Preliminary Design Review (PDR)
- Critical Design Review (CDR)

## Objectives

Upon completion of this module you should be able to:

- Identify the key policies, regulations, and guidance that influence the evolution of a Life Cycle Sustainment Plan (LCSP), and how they apply to the Life Cycle Logistician (LCL).
- Differentiate between the roles of the program manager, LCL or Product Support Manager (PSM) and other individuals and/or organizations in creating an LCSP.
- Identify the LCL's role in the management processes associated with developing an LCSP.
- Identify the LCL's role in the technical activities associated with developing an LCSP, including the Sustainment Implementation Plan.
- Identify the various metrics that affect the process of creating an LCSP and how those metrics are used.

## Module Contents

This module consists of five lessons. Each emphasizes the LCL's perspective and role in the practical application of the concepts presented. Select each lesson to review the key areas of focus.

- [Regulatory Environment](#)
- [Oversight and Review](#)
- [Management Processes](#)
- [Technical Activities](#)
- [Metrics](#)

## **Popup Text**

### **Regulatory Environment**

This lesson will provide a detailed description of the various policies and regulations guiding the LCL during the development of a product support plan. Understanding these regulations will help achieve program success during the Engineering & Manufacturing Development (EMD) phase of the product life cycle.

### **Oversight and Review**

This lesson addresses the various external influences and their input that is likely to affect the product support strategy. The LCL should be familiar with role of each organization or external influence and the various support strategies they use to support a product during the Engineering & Manufacturing Development (EMD) phase.

### **Management Processes**

This lesson addresses the LCL's role in various analytical stages and integration phases that should be outlined in a Life Cycle Support Plan.

### **Technical Activities**

This lesson addresses various technical activities used during the Engineering & Manufacturing Developments (EMD) phase. During this phase, there are many tools the LCL can use to influence the reliability, maintainability and supportability of a product.

### **Metrics**

This lesson addresses the various metrics the LCL should know and understand when developing a product support plan.

## Lesson Completion

You have completed the content for this lesson.

To continue, select another lesson from the Table of Contents on the left.

If you have closed or hidden the Table of Contents, click the Show TOC button at the top in the Atlas navigation bar.