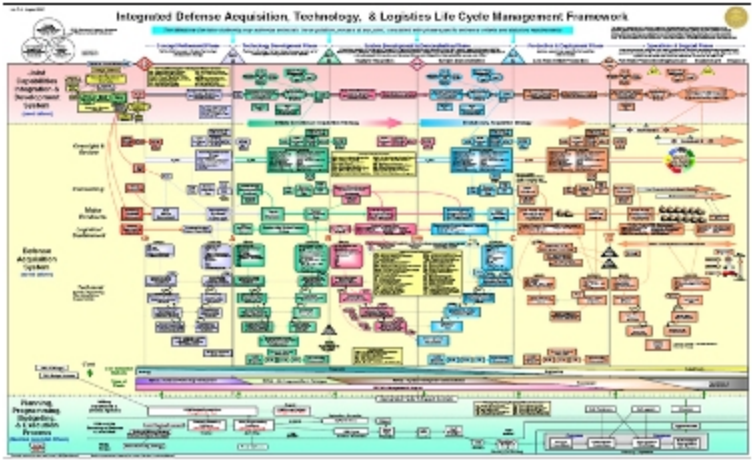
Welcome to Evaluate Product Support Capabilities

This module introduces the role of the Life Cycle Logistician (LCL) in evaluating product support capabilities. This evaluation is part of the second step of the Materiel Solution Analysis phase.

Select the Play button to listen to a message from the Systems Engineer.

Select the image to access the interactive wall chart website.



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Closed Captioning

Systems Engineer: Hey loggie, good job on those initial supportability objectives for Strike Talon, especially your preliminary work documenting the availability Key Performance Parameter (KPP) (composed of two components – materiel availability and operational availability) and its supporting Key System Attributes, reliability and ownership costs. Both the KPP and KSAs are critical to the development of an effective military capability. That information is going to come in handy when we finalize the Capability Development Document (CDD). I also heard you have really mastered the Joint Capability Integration and Development System (JCIDS) process – that should really help our interface with the Joint Staff – you know they are always making sure Strike Talon meets its capability requirements and maintains its joint service functionality.

We are definitely going to start seeing each other more often as Strike Talon moves into the Materiel Solution Analysis phase – System Engineering and Logistics carry a heavy load.

For now, we need to focus our actions on selecting the best materiel approaches that can meet the required capability for Strike Talon and then ultimately decide on a preferred system concept.

It's a good thing Systems Engineers have a rigorous process for translating user-defined capabilities from the Materiel Solution Analysis stage to operationally effective and suitable systems. This process hinges on System Operational Effectiveness – managing the interdependent relationship between system performance, system availability, process efficiency and life cycle cost.

As you know, Strike Talon has two potential alternatives, an unmanned ground vehicle or unmanned aerial vehicle. The folks over at the warfare center will conduct an Analysis of Alternatives (AoA) on the two Strike Talon alternatives to evaluate potential performance, operational effectiveness, operational suitability, and estimated costs needed to meet the mission requirements spelled out in the Initial Capability Document (ICD). The AoA assesses the advantages and disadvantages of alternatives being considered to satisfy capabilities, including the sensitivity of each alternative to possible changes in key assumptions or variables. The AoA is one of the key inputs to defining the system capabilities in the CDD.

While not directly on the AoA study team, you know the program Life Cycle Logistician plays a big part in

the AoA.
Your analysis of support alternatives will help estimate the support costs for each of the alternatives to include design, development, production and sustainment costs. We both know that those sustainment costs can be over 60% of the total life cycle costs.

You will also be asked to participate in market research. The evaluation of product support capabilities must include the assessment of commercial technologies, products and services. Market research is the primary means of determining the availability and suitability of commercial items and the extent to which the interfaces for these items have broad market acceptance, standards development, organization support and stability.

It would also be a good idea to brush up on your knowledge of Joint Capability Technology Demonstrations (JCTD) and open systems architecture. They provide unique supportability challenges and need to be addressed early in the Strike Talon program.

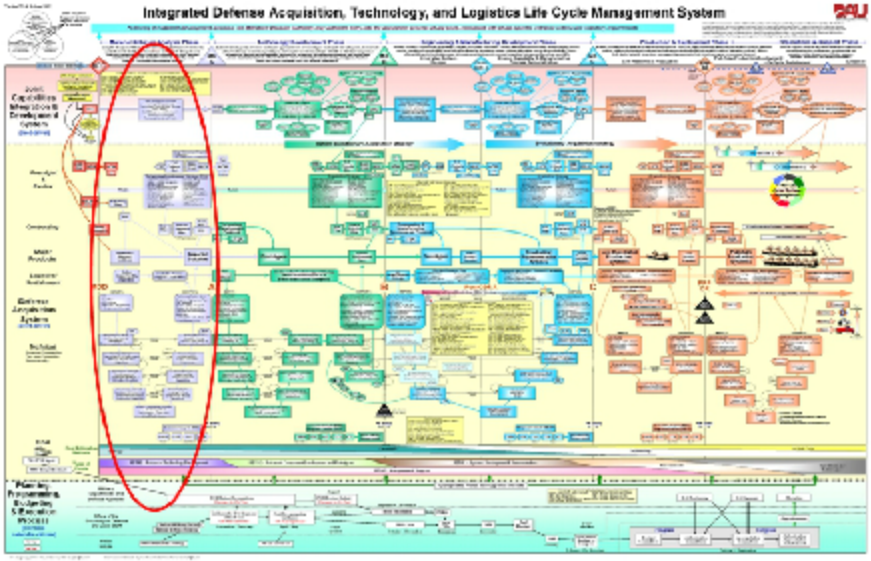
As you can tell there is a lot of work for the life cycle logistician to do in the Materiel Solution Analysis phase. Besides your support on the AoA, conducting market research, coordinating support for JCTDs and ensuring open systems architecture you will have to begin to document all these supportability requirements for inclusion in the draft CDD.

Good luck!

Why Conduct Product Supportability Capabilities Evaluation?

The main goal of the Materiel Solution Analysis phase is to refine the initial concept and develop a Technology Development Strategy (TDS). During this phase, the Life Cycle Logistician (LCL) participates in the following activities:

- Analysis of support alternatives
- Analysis of system operational effectiveness
- Market research
- Systems engineering
- Transitioning Joint Capability Technology Demonstrations (JCTDs), as appropriate
- Ensuring open systems/interoperability
- Identify key technologies and estimate life cycle costs



Major outputs from this phase of the life cycle include:

- Initial support and maintenance concepts and technologies
- Analysis of alternatives (AoA)
- Draft Capability Development Document (CDD) including market research results
- Test and Evaluation Strategy

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Long Description

This image is an animation of the wall chart. The animation enlarges the portion of the chart that involves the process of Evaluate Product Support Capabilities.

Objectives

Upon completion of this module you should be able to:

- Identify the key policies, regulations, and guidance that influence the evaluation of product support capabilities.
- Differentiate between the roles of the program manager's office and other stakeholders in evaluating product support capabilities.
- Describe the LCL's role in the management processes associated with evaluating product support capabilities.
- Identify the LCL's role in the technical activities associated with evaluating product support capabilities, including systems engineering, transitioning Joint Capability Technology Demonstrations (JCTDs), and ensuring open systems/interoperability.
- Identify life cycle sustainment metrics that will be used in the evaluation of product support capabilities.

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 link below to see an overview of that lesson.

- Regulatory Environment
- Oversight and Review
- Management Process
- Technical Activities
- Metrics

Popup Text

Regulatory Environment

This lesson will address the various regulations and guidance needed during the Materiel Solution Analysis phase to ensure the LCL can develop the appropriate documentation for product support.

Oversight and Review

As the LCL, you may participate in several program reviews conducted by the various oversight authorities. You need to know:

- Who the oversight authorities are and how they contribute to the program review process.
- The role of the LCL during the Materiel Solution Analysis phase to ensure appropriate product support.

Management Processes

As an LCL, you must understand management processes and what is expected of you on each project. This lesson will cover processes such as Analysis of Alternatives (AoA) and System Operational Effectiveness (SOE).

Technical Activities

This lesson will help you understand the role of the LCL with regards to various technical activities needed to establish a product support capability. Technical activities comprise an interdisciplinary approach encompassing the entire technical effort to evolve and verify an integrated and total life cycle balanced set of systems, people, and process solutions that satisfies customer needs.

Metrics

As an LCL, you need to understand what sustainment metrics are, where they come from and how they

are developed. This lesson will help you understand how sustainment metrics can drive supportability into the system design.

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.