



Logistics Health Assessment (LHA) User Guide

Version 1.2

OPR: AFLCMC/LG

14 February 2014

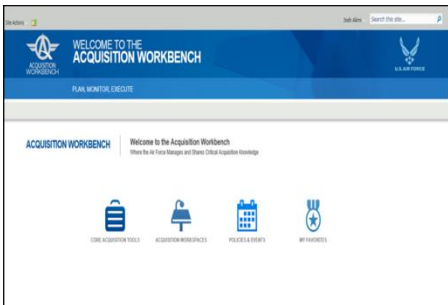
		Program Phase					
		Pre-MDO	MSA	TD	EMD	P&D	O&S
	ment						
	and contractor			X	X	X	X
	e frame IAW			X	X	X	X
	actual			X	X	X	X
	criptions for			X	X	X	X
1.5	software tracked within the CSA function described in the program's CMP?			X	X	X	X
1.6	Is CSA information maintained in a CM database along with the associated product/technical data?			X	X	X	X
1.7	Has a program IMP been developed and includes logistics support criterion to meet program milestones specified within program requirements documents?		X	X	X	X	X
	Has a program IMP been developed that details program support activities dependent						

Table of Contents	
	Page
1. Purpose	3
2. Description	3
3. Priority & Weighting Factors	4
4. Business Rules	4
1. Overview	4
2. Individual Criteria Responses	4
3. Individual PSE Color Codes	6
4. Overall LHA Color Code	6
5. Multiple LHAs Rollup to System Level	7
5. Trends	7
6. Product Support Element (PSE) Sub-Modules	8
Product Support Management	8
Design Interface	8
Sustaining Engineering	9
Supply Support	9
Maintenance Planning & Management	10
Packaging, Handling, Storage, & Transportation (PHS&T)	11
Technical Data	12
Support Equipment	12
Training & Training Support	13
Manpower & Personnel	14
Facilities & Infrastructure	14
Computer Resources	15
7. “How to” Section	15
8. Tool Assistance and Recommended Changes	16
Appendix A, Acronyms / Glossary of Terms	17
Appendix B: LHA Criteria	21
Appendix C: Defense Business Systems (DBS)	22

1. Purpose:

The Logistics Health Assessment (LHA) process guide describes the overall LHA and provides the user with additional information on the tool to include weighting factors, business rules, Product Support Element resources, and multiple annexes. The assessment is recommended to be accomplished quarterly, or as directed by higher headquarters guidance, with results will be presented through a multitude of reviews (Execution Reviews, Weapon System Review, etc). The results will also be utilized to depict Product Support health to senior leadership across a multitude of formats to include System, PEO, and Center levels.

2. Description:

The LHA provides the lifecycle community with a standard, tailorable, user friendly tool to report on and ensure long-term sustainment and availability considerations that can be identified and integrated into early program decisions. Ultimately, this assessment enhances the potential for systems to be fielded with a support structure in place and optimizes the warfighter's ability to meet mission performance requirements. The LHA is built around the 12 Product Support elements outlined in Air Force Instruction 63-101/20-101, Integrated Life Cycle Management, and utilizes intellectual capital documented in the Acquisition Sustainment Tool Kit (ASTK), Logistics Assessment (LA) Handbook, and other applicable documentation. The LHA is incorporated in the Acquisition Workbench (AcqWB).

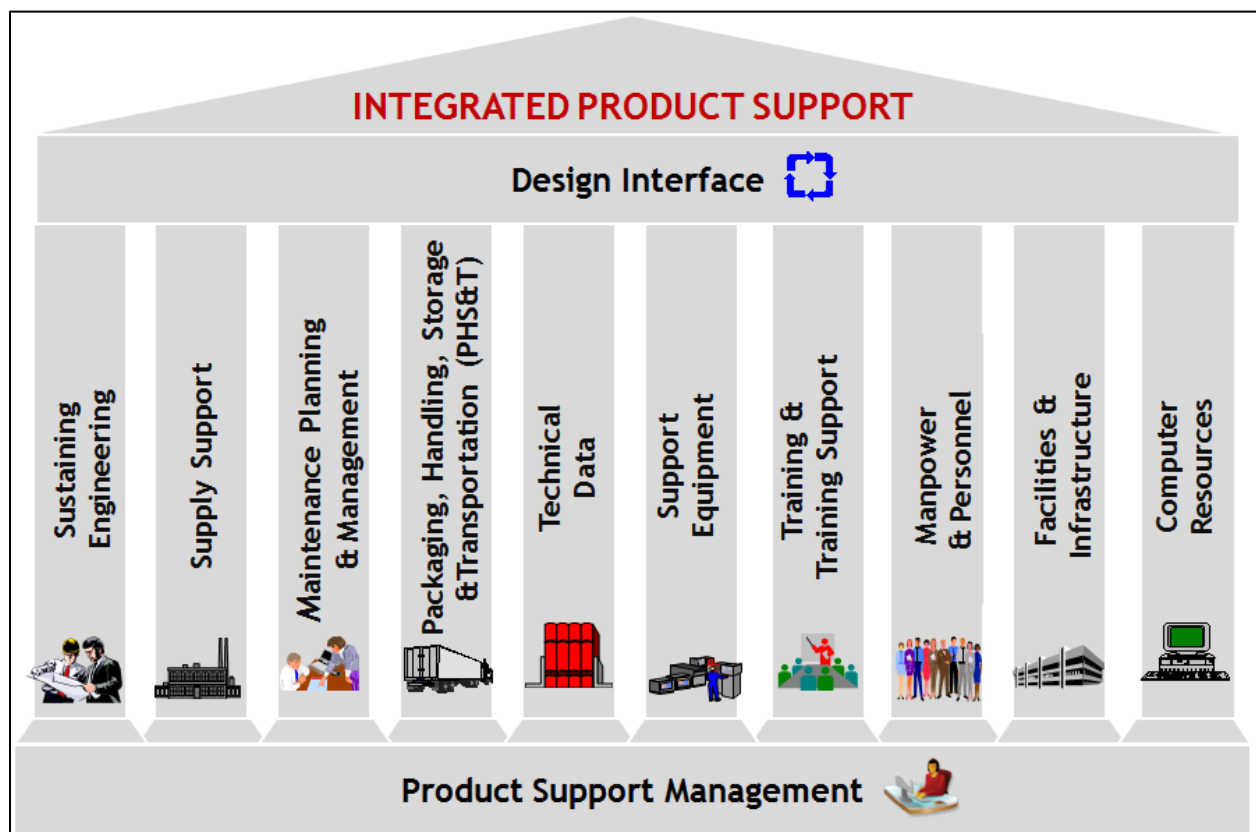


Figure 1: Integrated Product Support Elements (PSEs)

Source: DoD Product Support Manager Guidebook April 2011

3. Priority & Weighting Factors:

The criteria and PSEs across the program phases are assigned priorities and weights. The LHA calculates the user responses and produces an overall products support health assessment for the given program.

4. Business Rules:

1. Overview

- a. The LHA business rules are the result of updates to criteria, prioritization of criteria, and response choices based on working groups conducted in January/February 2014.
 - i. The updated LHA v2 is based on a Likert scale. Response options are Complete, Low Risk (in progress), Medium Risk (in progress), High Risk (in progress), Not Started, and N/A.
 - ii. Analysis was conducted to determine the optimal mix of priorities as well as the value each priority should have to the overall score.
- b. Areas covered by these business rules are:
 - i. Individual criteria responses
 - ii. Individual PSE color codes
 - iii. Overall LHA color code
 - iv. Multiple LHA's rolled up to system level

2. Individual Criteria Responses

- a. "Complete" response
 - i. Task/criteria applies to a program and is 100% complete.
 - 1. Comments may be provided if the task is 100% complete, but they are not mandatory.
 - 2. Example(s) for "Complete" response:
 - a. Has technical manual requirements been identified, developed and included in the contracts on a tailored TMCR 86-01?
 - i. Program Status: Complete, a tailored TMCR 86-01 and the contract is signed and in execution.
 - b. Are RAMS requirements included in ICD, CDD, CPD and translated into contractual requirements?
 - i. Program Status: Complete, contract is in place with RAM requirements included, as well as in the requirements document.
- b. "Low Risk (in progress)" response
 - i. Task/criteria applies to program and completion is likely; all vital resource expenditures and schedules should be executed at or near planned levels or timeframes.
 - 1. Comments may be provided if the task is "Low Risk (in progress)", but they are not mandatory.
 - 2. Example(s) for "Low Risk (in progress)" response:
 - a. Has the DSOR process been initiated and is it on schedule?

- i. Program Status: Low Risk (in progress), the process has been started and no major issues are known for the source of repair (falls in line with the platform, or has historical precedence such as landing gear).
 - b. Are all required facilities and infrastructure in place to support test and sustainment of new or modified systems?
 - i. Program Status: Low Risk (in progress), facilities are under contraction and planned schedule has 6 months of management reserve.
- c. “Medium Risk (in progress)” response
 - i. Task/criteria applies to program and completion is likely; some vital resource expenditures or schedules may have limited (acceptable) deviations from planned levels for timeframes.
 - 1. An issue will be added to capture the associated issue (Issue, Impact, and Mitigation Plan).
 - a. Issue: Identify and document the name of the issue.
 - b. Impact: Identify and document the impact this issue has on the program.
 - c. Mitigation: Identify and document the mitigation plan for this particular issue.
 - 2. Example(s) for this “Medium Risk (in progress)” response:
 - a. Has the depot activation funding requirement been submitted and approved to support the activation schedule?
 - i. Program Status: Depot activation funding has been submitted and is programmed across the FYDP; however, funding targets will not adequately cover requirements.
 - b. Are certified/verified technical manuals on track to be delivered to support operations and maintenance prior to fielding? .
 - i. Program Status: Tech manuals are on contract with deliver dates scheduled prior to fielding; however, engineering is late in locking down the design which will push tech manual development to a compressed schedule.
- d. “High Risk (in progress)” response
 - i. Task/criteria applies to a program and completion is unlikely; at least one vital resource expenditure or schedule is nearing failure; little margin remains for error in planning or execution.
 - 1. An issue will be added to capture the associated issue (Issue, Impact, and Mitigation Plan).
 - a. Issue: Identify and document the name of the issue.
 - b. Impact: Identify and document the impact this issue has on the program.
 - c. Mitigation: Identify and document the mitigation plan for this particular issue.
 - 2. Example(s) for this “High Risk (in progress)” response:
 - a. Are training equipment, services, calibration standards, test equipment, materiel, facilities, and personnel adequate to support the system to meet the Ready for Training Date (need date)?
 - i. Program Status: The simulators needed for this Weapon System are being procured through another office, and requirements were provided late to need. It is unlikely that the simulators will be delivered to train initial cadre of pilots.
 - b. Is the logistician a member of the Configuration Control Board (CCB)?
 - i. Program Status: The program CCB is currently structured so that a logistician can be added to the review when it is deemed necessary. Since a logistician is not on distribution for all CCB documentation, we are likely missing ECPs that need logistics input.
- e. “Not Started” response
 - i. Task/criteria applies to a program, but has not been started.
 - 1. An issue will be added to capture the associated issue (Issue, Impact, and Mitigation Plan).

- a. Issue: Identify and document the name of the issue.
 - b. Impact: Identify and document the impact this issue has on the program.
 - c. Mitigation: Identify and document the mitigation plan for this particular issue.
- 2. Example(s) for this “Not Started” response:
 - a. Has Container Design Retrieval System (CDRS) been utilized when programs require a specialized new or reusable long life container for an item?
 - i. Program Status: The program anticipates that we may need some CDRS but they have not yet been identified. This activity will not start until we identify a requirement.
 - b. Has PSM/LG participated in Product Improvement Working Groups (PIWGs) or similar reviews?
 - i. Program Status: The weapon system is just starting LRIP deliveries and these PIWGs are not scheduled to start until after fielding the first 30 units.
- f. “N/A” response
 - 1. A comment will be provided explaining why the task/criteria does not apply to the program.
 - 2. Example(s) for this “N/A” response:
 - a. Has the lead/using commands submitted facility budget requirements (MILCON/non-MILCON) in the appropriate FYs as required?
 - i. Program Status: This is a software program and does not require any facilities to be built; therefore, for the life of this program, it is not applicable.
 - b. Has PSM/LG initiated the DMAWG?
 - i. Program Status: This is a munitions program and has no depot repair, so we do not have a DMAWG.

3. Individual PSE Color Codes

- a. Green: If the responses to the criteria under a single PSE total between 80.00 and 100.00, that particular PSE color code will be “Green”.
- b. Yellow: If the responses to the criteria under a single PSE total between 60.00 and 79.99, that particular PSE color code will be “Yellow”.
- c. Red: If the responses to the criteria under a single PSE total 59.99 or less, that particular PSE color code will be “Red”.
- d. Gray: If all responses to a particular PSE are “N/A”, the PSE will show “Gray”.

4. Overall LHA Color Code

- a. Green: If the overall points value for the LHA totals between 80.00 and 100.00, the overall LHA color code will be “Green”.
- b. Yellow: If the overall points value for the LHA totals between 60.00 and 79.99, the overall LHA color code will be “Yellow”.
- c. Red: If the overall points value for the LHA total is 59.99 and below, the overall LHA color code will be “Red”.
- d. PM has the authority to override this color code based on his overall tactical view of the program.

5. Multiple LHAs rollup to System level

- a. All AML Programs will be given an equal weight and will roll-up to the System level.
 - i. Each program whether it is an ACAT I, II, or III will have the same weight when rolled-up.
 - ii. Programs that failed to perform a LHA will be excluded from the system level roll-up
 - iii. Computation for System rollup:
 1. Total number of program points for overall system (platform) and each PSE divided by number of programs/LHAs equals overall rollup numerical value
 - a. Green: If the overall points average for the LHAs under the overall system total between 80.00 and 100.00, the overall LHA and/or the individual PSE rollup color code will be “Green”.
 - b. Yellow: If the overall points average for the LHAs under the overall system total between 60.00 and 79.99, the overall LHA and/or the individual PSE rollup color code will be “Yellow”.
 - c. Red: If the overall points average for the LHAs under the overall system total is below 59.99, the overall LHA and/or the individual PSE rollup color code will be “Red”.
 - iv. PSM reviews and may override.
 1. PSM’s professional judgment may be used to override LHA data that flows into WSER charts.

5. Trends:

In addition to the color rating, each sub module in the LHA will also show a trend based on the previous LHA. The trend is designed to show relative improvement or degradation for each element evaluated during the reporting period.

- **Improving**: A trend is shown as “Improving” when progress is made in resolving logistics related issues and/or enhancing the health of the area of consideration. An improving trend is shown as an up arrow on the Windshield chart.
- **Steady**: A trend is shown as “Steady” when there is no significant improvement or degradation in the health of the area of consideration and/or when there is no significant progress in resolving logistics issues. A constant trend is denoted by no arrow appearing on the Windshield chart.
- **Deteriorating**: A trend is shown as “Deteriorating” when there is significant degradation in the health of the area of consideration and/or when new logistics issues are identified but not mitigated. A degrading trend is shown as a down arrow on the Windshield chart.

6. Product Support Element (PSE) Sub-Modules

Product Support Management
Product support management is the development and implementation of product support strategies to ensure supportability is considered throughout the system life cycle through the

optimization of the key performance outcomes of reliability, availability, maintainability and reduction of total ownership costs. The scope of product support management planning and execution includes the enterprise level integration of all twelve integrated product support elements throughout the lifecycle commensurate with the roles and responsibilities of the Product Support Manager position created under Public Law 111-84, Section 805.

Source: DAU IPS Element Guidebook Dec 2011

References

- Acquisition Sustainment Tool Kit (ASTK)
- AFI 63-101/20-101, Integrated Life Cycle Management
- AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- DoD Logistics Assessment (LA) Guidebook
- DoD Product Support Manager (PSM) Guidebook
- DoDI 5000.02, Operation of the Defense Acquisition System
- MIL-HDBK-502A, Product Support Analysis

Design Interface

Design interface is the integration of the quantitative design characteristics of systems engineering (reliability, maintainability, etc.) with the functional Integrated Product Support Elements (i.e., Integrated Product Support Elements). Design interface reflects the driving relationship of system design parameters to product support resource requirements. These design parameters are expressed in operational terms rather than as inherent values and specifically relate to system requirements. Thus, product support requirements are derived to ensure the system meets its availability goals and design costs and support costs of the system are effectively balanced. The basic items that need to be considered as part of design interface include:

- Reliability
- Maintainability
- Supportability
- IPS Elements
- Affordability
- Configuration Management
- Safety requirements
- Environmental and HAZMAT requirements
- Human Systems Integration
- Calibration
- Anti-Tamper
- Habitability
- Disposal
- Legal requirements

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

Sustaining Engineering

Sustaining Engineering spans those technical tasks (engineering and logistics investigations and analyses) to ensure continued operation and maintenance of a system with managed (i.e., known) risk. This includes:

- Collection and triage of all service use and maintenance data;
- Analysis of safety hazards, failure causes and effects, reliability and maintainability trends, and operational usage profiles changes;
- Root cause analysis of in-service problems (including operational hazards, deficiency reports, parts obsolescence, corrosion effects, and reliability degradation);
- The development of required design changes to resolve operational issues;
- Other activities necessary to ensure cost-effective support to achieve peacetime and wartime readiness and performance requirements over a system's life-cycle.

Technical surveillance of critical safety items, approved sources for these items, and the oversight of the design configuration baselines (basic design engineering responsibility for the overall configuration including design packages, maintenance procedures, and usage profiles) for the fielded system to ensure continued certification compliance are also part of the sustaining engineering effort. Periodic technical review of the in-service system performance against baseline requirements, analysis of trends, and development of management options and resource requirements for resolution of operational issues should be part of the sustaining effort.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)
- [MIL-HDBK-502A, Product Support Analysis](#)

Supply Support

Supply support consists of the management actions, procedures and techniques necessary to

acquire, catalog, receive, store, transfer, issue and dispose of spares, repair parts, and supplies. Supply support includes provisioning for initial support, as well as acquiring, distributing, and replenishing inventories as reflected in the supply chain management strategy. Proper supply support management results in having all the right spares, repair parts, and all classes of supplies available, in the right quantities, at the right place, at the right time, at the right price.

Source: DAU IPS Element Guidebook Dec 2011

References

- Acquisition Sustainment Tool Kit (ASTK)
- AFI 63-101/20-101, Integrated Life Cycle Management
- AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- DoD Logistics Assessment (LA) Guidebook
- DoD Product Support Manager (PSM) Guidebook
- DoDI 5000.02, Operation of the Defense Acquisition System
- MIL-HDBK-502A, Product Support Analysis

Maintenance Planning & Management

Maintenance Planning and Management establishes maintenance concepts and requirements for the life of the system for both hardware and software. It includes, but is not limited to:

- Levels of repair
- Repair times
- Testability requirements
- Support equipment needs
- Training and Training Aids Devices Simulators and Simulations (TADSS)
- Manpower skills
- Facilities
- Inter-service, organic and contractor mix of repair responsibility
- Deployment Planning/Site activation
- Development of preventive maintenance programs using reliability centered maintenance
- Condition Based Maintenance Plus (CBM+)
- Diagnostics/Prognostics and Health Management
- Sustainment
- PBL planning
- Post production software support

The process of establishing maintenance concepts, plans, and requirements for on-and-off-equipment maintenance during the life of the system or equipment. The assessment in this module translates the maintenance approach into maintenance task requirements to ensure the availability of the system or equipment. It also includes the process of performing maintenance and repair, both organic and contractor, or minor modifications/upgrades to provide operational end items. Examples include: Back shop work, local organic manufacturing, PDM, maintenance, software upgrades/updates, small project/modification (non ACAT) upgrades, technical data, tests/verify, and kit proofing.

Source: DAU IPS Element Guidebook Dec 2011

References

- Acquisition Sustainment Tool Kit (ASTK)

- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)
- [MIL-HDBK-502A, Product Support Analysis](#)

Packaging, Handling, Storage, & Transportation

PHS&T is the combination of resources, processes, procedures, design, considerations, and methods to ensure that all system, equipment, and support items are preserved, packaged, handled, and transported properly, including environmental considerations, 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 (land, rail, air, and sea).

Packaging, Handling, Storage and Transportation (PHS&T) focuses on the unique requirements involved with packaging, handling, storing and transporting not only the major end items of the weapon system but also spare parts, other classes of supply, infrastructure items, and even personnel. The requirements and constraints which a military environment imposes on these activities can significantly impact availability, reliability and life cycle costs of the weapon system. Care must be taken to ensure PHS&T objectives are applied to the entire system and not just the spare and repair parts, unfortunately this constrained application happens quite often. Additionally, PHS&T items may require their own life cycle support, such as maintenance of re-usable containers or special storage facilities similar to those required for explosives.

PHS&T is defined by its functional areas:

- **Packaging:** provides for product security, transportability, storability, with the added utility of serving as a medium of communication from the producer to the user. The nature of an item determines the type and extent of protection needed to prevent its deterioration. Shipping and handling, as well as the length and type of storage considerations, dictate materials selected for preservation and packing (P&P).
- **Handling:** involves the moving of items from one place to another within a limited range and is normally confined to a single area, such as between warehouses, storage areas, or operational locations, or movement from storage to the mode of transportation.
- **Storage:** infers the short or long term storing of items. Storage can be accomplished in either temporary or permanent facilities.
- **Transportation:** the movement of equipment and supplies using standard modes of transportation for shipment by land, air and sea. Modes of transportation include cargo, vehicle, rail, ship and aircraft.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)

- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)
- [MIL-STD-129 Military Marking for Shipment and Storage](#)

Technical Data

Technical Data represents recorded information of scientific or technical nature, regardless of form or character (such as equipment technical manuals and engineering drawings), engineering data, specifications, standards and Data Item Descriptions (DID). Data rights, data delivery, as well as use of any source controlled data as part of this element are included in technical data as are "as maintained" bills of material and system configuration identified by individual configuration item. Technical data does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration." See 10 U.S.C. 2302(4).

Technical manuals (TMs) including Interactive Electronic Technical Manuals (IETMs) and engineering drawings are the most expensive and probably the most important data acquisitions made in support of a system. TMs and IETMs provide the instructions for operation and maintenance of a system. IETMs also provide integrated training and diagnostic fault isolation procedures.

For ACAT I and II programs, a Technical Data Rights Strategy is required prior to each milestone review as part of the Acquisition Strategy. Technical data acquisition, management, and rights are defined in the Technical Data Rights Strategy.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFMCI 21-301, Air Force Materiel Command Technical Order System Implementing Policies \(No link...expected publishing date August 2013\)](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)
- [TO 00-5-1, AF Technical Order System](#)
- [TO 00-5-3, AF Technical Order Life Cycle Management](#)
- [TO 00-5-15, AF Time Compliance Technical Order \(TCTO\) Process](#)
- [TO 00-5-16, Software Managers & User's Manual for the AF Automated Computer Program Identification Number System \(ACPINS\)](#)

Support Equipment

Support equipment consists of all equipment (mobile or fixed) required to support the operation and maintenance of a system. It includes, but is not limited to, associated multi-use 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 equipment itself. During the acquisition of systems, program managers are expected to decrease the proliferation of support equipment into the inventory by minimizing the development of new support equipment and giving more attention to the use of existing government or commercial equipment.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

Training & Training Support

Consists of the policy, processes, procedures, techniques, Training Aids Devices Simulators and Simulations (TADSS), planning and provisioning for the training base including equipment used to train civilian and military personnel to acquire, operate, maintain, and support a system. This includes New Equipment Training (NET), institutional, sustainment training and Displaced Equipment Training (DET) for the individual, crew, unit, collective, and maintenance through initial, formal, informal, on the job training (OJT), and sustainment proficiency training. Significant efforts are focused on NET which in conjunction with the overall training strategy shall be validated during system evaluation and test at the individual, crew, and unit level.

Training is the learning process by which personnel individually or collectively acquire or enhance pre-determined job-relevant knowledge, skills, and abilities by developing their cognitive, physical, sensory, and team dynamic abilities. The "training/instructional system" integrates training concepts and strategies and elements of logistic support to satisfy personnel performance levels required to operate, maintain, and support the 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), job performance aids, and Interactive Electronic Technical Manuals. It is critical that to ensure alignment between system design and training program, any and all changes must be evaluated as to the impact on the training program. The training products themselves may require separate configuration management and supportability.

The Product Support Manager needs to understand the requirements for training related to the civilian and military workforce for weapon systems acquisition and the training required for civilians and military to lead, operate and sustainment the weapon system being fielded.

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

Manpower & Personnel

Involves the identification and acquisition of personnel (military and civilian) with the skills and grades required to operate, maintain, and support systems over their lifetime. Early identification is essential. If the needed manpower is an additive requirement to existing manpower levels of an organization, a formalized process of identification and justification must be made to higher authority.

The terms “Manpower” and “Personnel” are not interchangeable terms.

“Manpower” represents the number of personnel or positions required to perform a specific task. This task can be as simple as performing a routine administrative function, or as complex as operating a large repair depot. Manpower analysts determine the number of people required, authorized, and available to operate, maintain, support, and provide training for the system. Manpower requirements are based on the range of operations during peacetime, low intensity conflict, and wartime. Requirements should consider continuous, sustained operations and required surge capability.

“Personnel”, on the other hand, indicates those human aptitudes (i.e., cognitive, physical, and sensory capabilities), knowledge, skills, abilities, and experience levels that are needed to properly perform job tasks. Personnel factors are used to develop the military occupational specialties (or equivalent DoD Component personnel system classifications) and civilian job series of system operators, maintainers, trainers, and support personnel. Personnel officials contribute to the Defense acquisition process by ensuring that the program manager pursues engineering designs that minimize personnel requirements, and keep the human aptitudes necessary for operation and maintenance of the equipment at levels consistent with what will be available in the user population at the time the system is fielded.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)

- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

Facilities & Infrastructure

Consists of the permanent and semi-permanent real property assets required to support a system, including studies to define types of facilities or facility improvements, location, space needs, environmental and security requirements, and equipment. It includes facilities for training, equipment storage, maintenance, supply storage, ammunition storage, and so forth.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 10-503 Base Unit Beddown Program](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)
- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

Computer Resources

Computer Resources encompasses the facilities, hardware, software, documentation, manpower, and personnel needed to operate and support mission critical computer hardware/software systems. As the primary end item, support equipment, and training devices increase in complexity, more and more software is being used. The expense associated with the design and maintenance of software programs is so high that one cannot afford not to manage this process effectively. It is standard practice to establish a computer resource working group to accomplish the necessary planning and management of computer resources.

Computer programs and software are often part of the technical data that defines the current and future configuration baseline of the system necessary to develop safe and effective procedures for operation and maintenance of the system. Software technical data comes in many forms to include, but not limited to, specifications, flow/logic diagrams, Computer Software Configuration Item (CSCI) definitions, test descriptions, operating environments, user/maintainer manuals, and computer code.

Computer resources is the information technology resources and infrastructure required to operate and support mission critical systems to include manpower, personnel, hardware, software, and documentation such as licenses and services.

Source: DAU IPS Element Guidebook Dec 2011

References

- [Acquisition Sustainment Tool Kit \(ASTK\)](#)
- [AFI 63-101/20-101, Integrated Life Cycle Management](#)
- [AFPAM 63-128, Guide to Acquisition and Sustainment Life Cycle Management](#)
- [Defense Acquisition University \(DAU\) Defense Acquisition Guidebook \(DAG\)](#)

- [Defense Acquisition University \(DAU\) Integrated Product Support Element \(PSE\) Guide Book](#)
- [DoD Life Cycle Sustainment Plan](#)
- [DoD Logistics Assessment \(LA\) Guidebook](#)
- [DoD Product Support Manager \(PSM\) Guidebook](#)
- [DoDI 5000.02, Operation of the Defense Acquisition System](#)

7. LHA “How to” Section:

This section will be completed upon Full Operational Capability (FOC) of the LHA. This section will list some of the more common functions that are performed in the LHA and step-by-step procedures on how to perform them.

8. Tool Assistance and Recommended Changes:

For further assistance on how to perform functions within the LHA, please contact the SMART Help Desk at 888-925-4561 or via e-mail at SMART@Hanscom.af.mil.

For LHA policy and process questions, please contact AFLCMC/LG at 937-255-7185 (DSN 785-7185) or via e-mail at AFLCMC.LG.Workflow@wpafb.af.mil.

For any recommended changes to the LHA tool or user manual, please contact AFLCMC/LG at 937-255-7185 (DSN 785-7185) or via e-mail at AFLCMC.LG.Workflow@wpafb.af.mil.

APPENDIX A

Acronyms / Glossary of Terms

AAIP	Aircraft Availability Improvement Plan
ACAT	Acquisition Category
ACPINS	Automated Computer Program Identification Number System
AcqWB	Acquisition Workbench
ADM	Acquisition Decision Memorandum
AETC	Air Education and Training Command
AFB	Air Force Base
AFI	Air Force Instruction
AFLCMC	Air Force Life Cycle Management Center
AFMC	Air Force Materiel Command
AFPAM	Air Force Pamphlet
AFSC	Air Force Sustainment Center
AoA	Analysis of Alternatives
APDP	Acquisition Professional Development Program
AS	Acquisition Strategy
ASTK	Acquisition Sustainment Tool Kit
AT&L	Acquisition, Technology, & Logistics
ATE	Automated Test Equipment
ATS	Automatic Test System
BCA	Business Case Analysis
BFR	Basic Facilities Requirements
BIT	Built-In-Test
CAM	Centralized Asset Management
CARD	Cost Analysis Requirements Description
CBA	Capabilities Based Assessment
CBM+	Capabilities Based Maintenance Plus
CCB	Configuration Control Board
CCTD	Concept Characterization Technical Description
CDD	Capability Development Document
CDRL	Contract Data Requirements List
CDRS	Container Design and Retrieval System
CLIN	Contract Line Item Number
CONOP	Concept of Operations
COOP	Continuity of Operations Plan
COTS	Commercial Off The Shelf
CP&A	Capability Planning & Analysis
CPD	Capability Production Document
CPINS	Computer Program Identification Numbers
CSA	Configuration Status Accounting
CSI	Critical Safety Item
CSWS	Contractor Supported Weapon System
CWT	Customer Wait Time
DAMIR	Defense Acquisition Management Information Retrieval
DAU	Defense Acquisition University

DFARS	Defense Federal Acquisition Regulation Supplement
DMAWG	Depot Maintenance Activation Working Group
DMSMS	Diminishing Manufacturing Sources & Materiel Shortages
DoD	Department of Defense
DR	Deficiency Report
DRMO	Defense Utilization and Marketing Office
DRMP	Design Reference Mission Profile
DSOR	Depot Source of Repair
EMD	Engineering & Manufacturing Development
EN	Engineering
ESOH	Environmental, Safety, and Occupational Health
ETIMS	Enhanced Technical Information Management System
FAR	Federal Acquisition Regulation
FM	Financial Management
FMECA	Failure Mode, Effects, and Criticality Analysis
FMS	Foreign Military Sales
FOB	Found on Base
FOC	Full Operational Capability
FRACAS	Failure Reporting, Analysis, and Corrective Action System
FRP	Full Rate Production
FY	Fiscal Year
FYDP	Future Years Defense Program
HFE	Human Factors Engineering
HSI	Human System Interface
HW	Hardware
IAW	In Accordance With
ICD	Initial Capabilities Document
ICE	Independent Cost Estimate
ICP	Inventory Control Point
ICS	Interim Contractor Support
IETMs	Interactive Electronic Technical Manuals
ILSMT	Integrated Logistics Support Management Team
IMDS	Integrated Maintenance Data System
IMP	Integrated Master Plan
IMS	Integrated Master Schedule
IOC	Initial Operational Capability
IPS	Integrated Product Support
IPT	Integrated Product Team
ISP	Information Support Plan
IUID	Item Unique Identification
JDRS	Joint Deficiency Reporting System
JEDMICS	Joint Engineering Data Management Information and Control System
JRMET	Joint Reliability & Maintainability Evaluation Team
KPP	Key Performance Parameter
KSA	Key System Attribute
LA	Logistics Assessment
LCSP	Life Cycle Sustainment Plan
LG	Logistics

LHA	Logistics Health Assessment
LLI	Long Lead Item
LORA	Level of Repair Analysis
LRDP	Logistics Requirements Determination Process
LRIP	Low Rate Initial Production
MAJCOM	Major Command
MDD	Materiel Development Solution
MER	Manpower Estimate Report
MILCON	Military Construction
MSA	Materiel Solution Analysis
NDI	Non-Developmental Item
O&S	Operations & Support
OJT	On Job Training
OSS&E	Operational Safety, Suitability, and Effectiveness
P&D	Production & Deployment
PBL	Performance Based Logistics
PESHE	Program Environmental Safety and Health Evaluation
PGM	Product Group Manager
PHS&T	Packaging, Handling, Storage, and Transportation
PIWG	Product Improvement Working Group
PM	Program Manager
POC	Point of Contact
POF	Perfect Order Fulfillment
POM	Program Objective Memorandum
PPP	Public Private Partnership / Program Protection Plan
PQDR	Product Quality Deficiency Report
PSI	Product Support Integrator
PSM	Product Support Manager
PSP	Product Support Provider
PWS	Performance Work Statement
RAD	Requirement Assessment Document
RAM	Reliability Availability Maintainability
RAM-C	Reliability, Availability, Maintainability – Cost
REMIS	Reliability and Maintainability Information System
RFID	Radio Frequency Identification
RFP	Request for Proposal
RSSP	Replaced System Sustainment Plan
SDT	Second Destination Transportation
SE	Support Equipment / Sustaining Engineering
SEP	Systems Engineering Plan
SERD	Support Equipment Requirements Document
SMART	System Metric and Reporting Tool
SME	Subject Matter Expert
SMR	Source, Maintenance, and Recoverability
SNT	Serial Number Tracking
SOO	Statement of Objectives
SOW	Statement of Work
SPI	Special Packaging Instructions

SPIRES	Special Packaging Instructions Retrieval and Exchange System
SW	Software
TCTO	Time Compliance Technical Order
TD	Technology Development
TDS	Technical Data Strategy
TEMP	Test and Evaluation Master Plan
TES	Test & Evaluation Strategy
TMCR	Technical Manual Contract Requirement
TNMCS	Total Non-Mission Capable Supply
TO	Technical Order
TOC	Total Ownership Cost
TOMP	Technical Order Management Plan
USC	United States Code
USG	United States Government
WAD	Workload Assignment Document

Glossary of Terms

This section in development

APPENDIX B

LHA Criteria

Embedded File:



LHA Criteria -
Current - 14 Feb 2011

SharePoint Link to File:

https://org4.eis.afmc.af.mil/sites/1751/AFLCMCLGI/LGIA_Branch_Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2f1751%2fAFLCMCLGI%2fLGIA%5fBranch%5fDocuments%2fLogistics%20Health%20Assessment%2fLHA%20Criteria&FolderCTID=0x0120002CB4EE336D711C448CE01337F36EA063&View=%7b79C14A7A%2d89BF%2d4BEA%2dAB19%2d702E4B4BFAC4%7d

APPENDIX C

THIS SECTION IN WORK

Defense Business Systems (DBS)