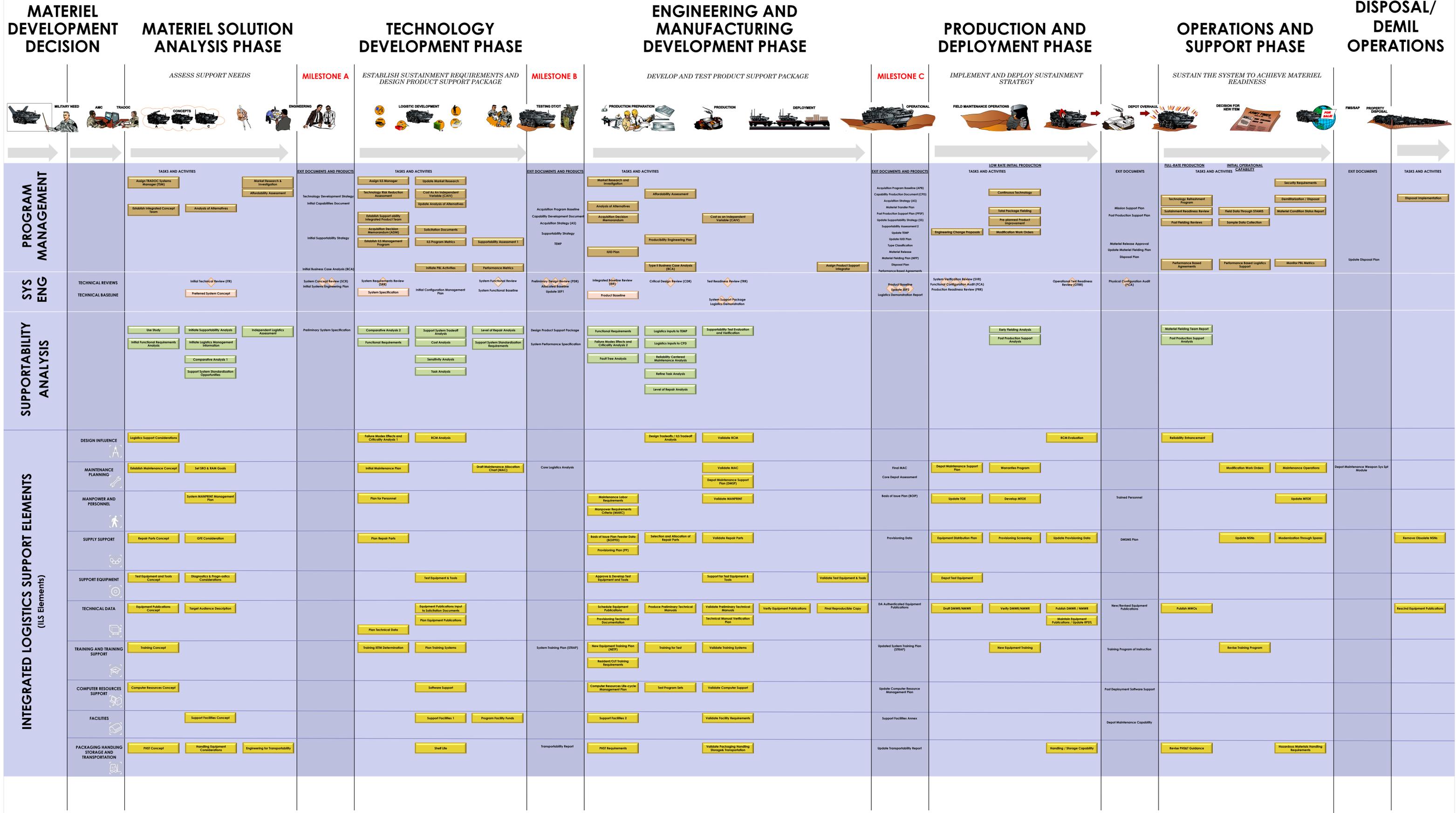
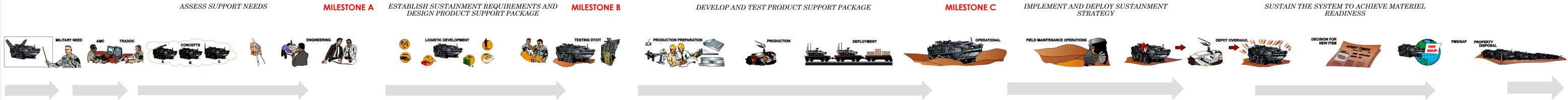


# LIFE CYCLE LOGISTICS CHART



# LIFE CYCLE LOGISTICS CHART

## MATERIEL DEVELOPMENT DECISION      MATERIEL SOLUTION ANALYSIS PHASE      TECHNOLOGY DEVELOPMENT PHASE      ENGINEERING AND MANUFACTURING DEVELOPMENT PHASE      PRODUCTION AND DEPLOYMENT PHASE      OPERATIONS AND SUPPORT PHASE      DISPOSAL/DEMIL OPERATIONS



**AA**  
Affordability assessment demonstrates funding/manpower requirements are achievable.

**AB**  
Allocated Baseline designates Support includes all efforts to acquire hardware, midlevel/configuration items making up a system and allocates the system function and performance requirements across the CLs. Reference: MIL-HDBK-61A(SE).

**ADM**  
The Acquisition Decision Memorandum documents Milestone Decision Authority decisions.

**AEP**  
Authenticated Equipment Publications are technical publications printed by the order of the Secretary of the Army indicating the US Government takes legal responsibility for the content of the publications. Reference: AR 25-30.

**AoA**  
Analysis of Alternatives is used early to identify system alternatives that offer military or economic benefit.

**APB**  
The Acquisition Program Baseline documents program performance, schedule, and cost objectives.

**AS**  
The Acquisition Strategy documents approach to achieve program objectives within the resource constraints.

**BCA**  
Business Case Analysis (Informal Type I and Formal Type II) is a study of expected benefits, costs, and savings from implementation of alternative product support strategies. Reference: AR 700-127.

**BOIP**  
Basis of Issue Plan describes a new system, its capabilities, quantity/placement in the force structure, MOs to operate/maintain it, component major items, associated support items of equipment, displacement of equipment and personnel. Reference: AR 71-32.

**BOIPFD**  
Basis of Issue Plan Feeder Data is a compilation of logistics/manpower data for a new system at the line item number (LIN) level. Reference: AR 71-32; AR 5-23.

**CAIV**  
Cost As An Independent Variable is a DoD mandate for major programs requiring that total ownership cost be considered equal with performance and schedule.

**CDA**  
Core Depot Assessment determines if a system can be supported by existing organic capability or requires new capability to repair, overhaul or modify. Reference: AR 750-1, AR 70-1.

**CDD**  
The Capability Development Documents builds on the ICD; provides detailed performance parameters for developing a system; commits a program to a development decision. Reference: CJCSI 3170.01F.

**CDR**  
Critical Design Review is a technical review to ensure a system can proceed into fabrication, demonstration, and test; meets requirements within cost, schedule, and risk, based on system final design as captured in product specifications for each configuration item in product baseline.

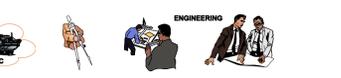
**CLA**  
Core Logistics Analysis defines the degree to which the program meets 10 USC 2460, 10 USC 2464, 10 USC 2466, 10 USC 2474.

**Comparative Analysis**  
Helps identify supportability, cost, and readiness drivers of each new system alternative.

**CM Plan**  
Configuration Management Plan documents a tailored CM program to control functional/physical characteristics of a system and records the changes.

**CPD**  
Capability Production Document addresses the production elements of an acquisition program. Reference: AR 71-9, AR 70-1 and AR 700-127.

ASSESS SUPPORT NEEDS



**CR Concept**  
Computer resources concept describes requirements for hardware, software, and firmware needed to operate and sustain the system.

**CRLCMP**  
Computer Resources Life-Cycle Management Plan describes development, acquisition, test, and support plans over the life cycle of computer resources integral to direct support of systems.

**CRS**  
Computer Resources re, firmware, software, documentation, etc. required to sustain computer resources for operation/maintenance of the system.

**CTR**  
Continuous Technology Refreshment is an acquisition strategy that applies technology insertion and use of state-of-the-art components to enhance system capabilities throughout its life.

**Demilitarization/Disposal**  
Addressed in the acquisition strategy by the PM to ensure system disposal can be carried out IAW legal and regulatory requirements. Reference: DoD 4160.21-M.

**Depot Maintenance Capability**  
The right electrical, mechanical, and industrial capabilities for the repair of the system certified via the Pilot Depot Overhaul Program. Reference: DA Pam 700-56, AR 750-1.

**DMSF**  
Depot Maintenance Support Plan provides resource requirements and plans for achieving depot maintenance capability based on forecasted workload.

**Depot Maintenance WSSM**  
The Weapon System Support Module provides a Class IX weapons system view of wholesale stock position for both Army and DLA-managed parts.

**Depot Test Equipment**  
All test equipment required for overhaul/rebuild/reset of a system.

**Design Influence**  
Logistics related design parameters (RAM, HFE, safety, survivability, environmental considerations, energy management, and corrosion prevention measures).

**Diagnostics/Prognostics Considerations**  
Initiative for delivering systems designed for ease of maintenance with built in diagnostics, less test equipment and fewer maintenance specialists.

**DMSMS Plan**  
Diminishing manufacturing sources and materiel shortages (DMSMS) is the loss of manufacturing sources, or suppliers. A proactive DMSMS management process is critical to provide affordable and operational systems by increasing availability and supportability. Reference: AR 700-90, AR 710-1.

**DMWR/NMWR**  
Depot Maintenance Work Requirements/National Maintenance Work Requirements identify new depot maintenance workload required for sustainment-level maintenance (depot and specialized repair facilities).

**Early Fielding Analysis**  
Assesses impact of new system on existing systems and identifies logistic support resource requirements and impact if not obtained.

**ECP**  
Engineering Change Proposal is a hardware and software, configuration changing a system before government acceptance. Reference: AR 750-10.

**Engineering for Transportability**  
Ensures Army systems are designed to be rapidly and efficiently moved to any place in the world by land, rail, water, and air. Reference: AR 70-44/47.

**Equipment Distribution Plan**  
Provided by the PM to each Gaining Command prior to fielding, based on the current BOIP and common TOE update. Reference: DA Pam 700-142.

**EP Concept**  
Equipment Publications Concept identifies types of publications required for system operation and support. Reference: AR 25-30.

**Exit Documents/Products**  
Program specific accomplishments that must be demonstrated before a program can progress to the next acquisition phase and are documented in the ADM.

ESTABLISH SUSTAINMENT REQUIREMENTS AND DESIGN PRODUCT SUPPORT PACKAGE



**Facilities Planning**  
Management actions to determine requirements and acquire real property assets needed to support a system.

**FMECA**  
Failure Modes Effects & Criticality Analysis identifies modes of failure, effects of each failure, and criticality of each effect on mission, safety, thus identifying corrective maintenance requirements. Fault Tree Analysis Analysis of possible system failures to identify probability of system damage or safety hazards to human users under failure conditions.

**Field Data Through STAMIS**  
The tracking of maintenance support, supply requisitions, fleet management and system sustainment assessment within the Standard Army Management Information Systems (JULLS, SARSS, SAMS, and GCSS).

**Final Reproducible Copy**  
Approved manuscript with illustrations ready for printing as an Army publication. Reference: AR 25-30, DA Pam 25-40.

**FCA**  
Functional Configuration Audit is formal examination of functional characteristics of a configuration system to verify functional configuration specifications were achieved. Reference: MIL-HDBK-61A(SE).

**Functional Requirements Analysis**  
The result of an engineering process to arrive at the approved functional requirements.

**GFE**  
Government Furnished Equipment is property acquired by the government, and subsequently made available to the contractor.

**Handling/Storage Capability**  
The resources and methods required for preserving, loading/ unloading, and storing materiel systems, their support equipment and associated supplies.

**Handling Equipment Considerations**  
Early consideration of handling equipment is important to maximize use of standard handling equipment.

**Hazardous Materials Handling Requirements**  
Advance planning is required to identify, classify (and minimize) materials requiring specialized handling.

**IBR**  
Integrated Baseline Review (IBR). A joint assessment of the Performance Measurement Baseline conducted by the program manager and contractor.

**ICD**  
Initial Capabilities Document documents the requirement for a materiel approach to satisfy a capability gap(s) in terms of the DOTMLPF. Reference: CJCSI 3170.01F, AR 71&dash;9.

**ICT**  
Integrated Concept Team establishes by CBTDEV to coordinate ILS planning until Milestone B. The ICT includes the MATDEV and other organizations as required. Reference: DA Pam 70-3, CJCSI 3170.01E.

**ILA**  
Independent Logistics Assessment provides the PEO and MDA independent and objective evaluations of a program's logistics health at each acquisition milestone. Reference: DODD 5000.1.

**ILS**  
Integrated Logistics Support is the iterative process to develop/implement product support. Reference: AR 700-127.

**ILSM**  
The Integrated Logistics Support Manager chairs the Supportability IPT (SIPT) and should be appointed by the PM by Milestone B. Reference: AR 700-127.

**ILS Program**  
Integrated logistics support management activities to ensure supportability is considered throughout the life cycle. Reference: DA Pam 70-3, DA Pam 700-56, CJCSI 3170.01E.

**ILS Program Metrics**  
DoD requires PMs to implement a performance measurement system on which to base attainment of supportability requirements via operational testing.

DEVELOP AND TEST PRODUCT SUPPORT PACKAGE



**IOC**  
Initial Operational Capability is attained when units in the force structure have the ability to employ and maintain a new system delivered to them.

**ITR**  
Initial Technical Review ensures a program's alternative materiel solutions are assessed for viability to meet the user needs (cost, schedule, performance risk and enabling technologies). IJUD Plan Item Unique Identification Plan is a mandatory plan to ensure all Army items will be marked with identifiers and registered in the DoD IJUD Registry. Reference: DoD Directive 8320.03.

**LCC Analysis**  
Life Cycle Cost Analysis minimizes total ownership cost of a system while meeting performance, logistics supportability, and schedule requirements.

**LD**  
Logistics Demonstration confirms support resources and tasks will sustain the system as intended. Reference: AR 700&dash;127.

**LMI**  
Logistics Management Information is the support-related engineering and logistics data for use in system management. Reference: MIL-PRF-49506, MIL-HDBK-502, GEIA-STD-0007, and GEIA-HB-0007.

**LORA**  
Level of Repair Analysis determines optimum maintenance levels for repair and recovery of the system and components.

**LD Report**  
The Logistics Demonstration Report details on the conduct of the LD, data collection, analysis results, findings, and follow-on actions.

**MAC**  
Maintenance Allocation Charts authorize maintenance functions (e.g., inspect, test, replace, repair, etc.) for each maintenance level.

**Maintenance Concept**  
Defines the system support requirements, maintenance workload and force structure required to maintain the weapon system (including skills, tools, support equipment, etc. at each level of maintenance. Reference: AR 750-1.

**Maintenance Plan**  
A description of the system maintenance concept, constraints and plans for support of end items under development. Reference: AR 700-127, DA Pam 700-56.

**MARC**  
Manpower Requirements Criteria are Army standards to determine minimum mission-essential skill and manpower requirements for support functions in TOEs.

**MANPRINT**  
Manpower and Personnel Integration requirements are documented in the CDD/CPD.

**Materiel Development Decision**  
Formal entry point into the acquisition process.

**MCSR**  
Materiel Condition Status Report provides HQDA with readiness information on systems.

**MFP**  
Materiel Fielding Plan documents plans for successfully fielding a new system.

**MFRF Report**  
Materiel Fielding Team Report is an after action document addressing problems, shortages, and deficiencies encountered during the fielding operation to each unit.

**MI**  
Market Investigation (MI) evaluates potential use of commercial items to meet the user needs.

**MR**  
Materiel Release certifies Army systems are safe, suitable and supportable. Reference: AR 700-142.

**MSP**  
Materiel Support Plan identifies the support structure in the using units and is prepared by the gaining command in response to the Materiel Fielding Plan. Reference: DA Pam 700-142.

IMPLEMENT AND DEPLOY SUSTAINMENT STRATEGY



**MTP**  
Materiel Transfer Plan documents Displaced Equipment Fielding. Reference: DA Pam 700-142.

**MTOE**  
Modified Table of Organization & Equipment is an authorization document that adapts a basic TOE to the needs of a type of unit. It prescribes the wartime mission, capabilities, organizational structure, personnel and equipment requirements for military units.

**MTS**  
Modernization Through Spares is an acquisition strategy which reduces cost to upgrade systems through incremental technology insertion. Reference: AR 750-10, AR 700-127.

**MWO**  
Modification Work Orders are any alterations/modernization of a system to improve effectiveness, efficiency, reliability, or safety of that item. Reference: AR 750-10.

**NET Plan**  
New Equipment Training Plan documents initial operational and support training from the PM to the tester and user. Reference: AR 350-1.

**OTRR**  
Operational Test Readiness Review ensures the "production configuration" system can proceed into operational testing.

**PBA**  
Performance Based Agreements document support metrics and agreements between the Warfighter and PM, between PM and PSI, and between PSI and PSPs to meet PBL requirements.

**PBL**  
Performance Based Logistics is the preferred product support strategy for executing affordable support linked to specific warfighter requirements for operational capability. Reference: AR 70&dash;1.

**PCA**  
Physical Configuration Audit verifies the design documentation matches the item as specified in the contract and confirms the manufacturing processes are adequately planned and controlled.

**PDR**  
Preliminary Design Review ensures a system can proceed to detailed design and meet the requirements within cost, schedule, and risk.

**PDSS**  
Post Deployment Software Support includes software support activities that occur after deployment of the system used to keep software current. DA Pam 700-56, CJCSI 6212.01C.

**PEP**  
Productibility Engineering Plan ensures a system can be produced in required quantities efficiently and economically while meeting design objectives. Reference: MIL-HDBK-881.

**PHS&T Concept**  
Packaging Handling Storage & Transportation consists of considerations/methods to ensure that a system and its support items are preserved, packaged, handled, and transported properly. The PHS&T concept describes requirements including potential for use of hazardous materials.

**POI**  
Program of Instruction includes course objectives, course schedules, teaching instructions, lesson plans, course content, instructional aids, methods of instruction, and techniques for delivery.

**Post Fielding Review**  
Verifies the fielded system meets cost, performance, and support goals.

**PPSA**  
Post Production Support Analysis assesses life cycle support requirements of the system before closing of production lines to ensure that adequate support resources over its remaining life.

**Preliminary System Specification**  
The preliminary system specification is the output of the Systems Engineering Process applied during the Concept Refinement Phase.

**Product Baseline**  
Description of functional and physical characteristics of the Configuration Item Initiated at the Critical Design Review (CDR) and finalized at the Physical Configuration Audit.

SUSTAIN THE SYSTEM TO ACHIEVE MATERIEL READINESS



**SFR**  
System Functional Review ensures a system can proceed into preliminary design and system functional requirements from the CDD are consistent with budget, schedule, and risk.

**Shelf Life**  
Some items deteriorate over time in storage and require intensive controls to minimize loss. Reference: DoD 4140.27-M.

**SIPT**  
Supportability Integrated Product Team is a multi-disciplined team set up by the PM at program initiation to manage the ILS Program for a system. Reference: AR 700-127, DA Pam 700-56.

**SMMP**  
System MANPRINT Management Plan documents requirements and status for accomplishment of MANPRINT objectives. Reference: AR 602-2 and AR 700-127.

**SRR**  
Sustainment Readiness Review is a fielding/post deployment review to assess the performance of the support system for a system and measure logistics support suitability over the lifecycle.

**SRR**  
Systems Requirements Review determines if requirements are fully defined and consistent with the technology solution and ensures traceability of requirements to the ICD/CDD.

**SS**  
Supportability Strategy is a comprehensive plan describing ILS requirements and milestones to be accomplished ensure an acquisition system can be adequately supported when fielded.

**SSP**  
System Support Package. An SSP is a representation of the system support structure being developed to support a materiel system when. An SSP Components List (SSPCL) lists items included in the SSP such as: draft equipment publications, transportability guidance, personnel requirements (quantity by MOS), TMs, training systems, tools, TMDE, support equipment, and spare/repair parts. Reference: AR 70-1, AR 700-127, AR 71-3.

**STRAP**  
System Training Plan is the plan for individual, unit, institutional and new equipment training required for the introduction of a new or displaced system into an ACOM or ASCC. Reference: AR 350-1.

**Support Facilities Concept**  
Documents real property assets required to support operation and support of a system and its support equipment and coordinated with the Army Corps of Engineers.

**Supportability Assessment**  
Evaluate the ability of a system and its support system design to provide for sustained system performance. Required at each major decision review. Reference: AR 700-127.

**System Performance Specification**  
The guiding technical document of a system that defines what the system being designed must do, and not how it must do it. Defense Acquisition Guidebook.

**System Specification**  
Guides vendor selection and the system development effort by setting performance/technical requirements/constraints, allocating requirements to functional areas, and defining interfaces.

**SE**  
System Engineering is an interdisciplinary, documented technical effort to design systems products/processes to meet user needs.

**Security Requirements**  
Describe requirements for storage/use of classified items and addresses the security level and any electronic countermeasures/TEMPEST measures for a new system.

**SEP**  
Systems Engineering Plan documents the systems engineering (SE) approach for a program, captures the status and frames SE within the overall program management effort.

**SFB**  
System Functional Baseline is established at the conclusion of an SFR. Typically accomplished during the System Development and Demonstration (SD&D) phase. Documentation describing system/segment functional characteristics and the verification required to demonstrate the achievement of those specified functional characteristics. The System or Segment Specification establishes the Functional Baseline.

**TDS**  
Technology Development Strategy focuses on activities of the Technology Development Phase

**Technical Baseline**  
Defines goals/scope and provides design requirements, criteria, and characteristics that provide the basis for project definition.

**Technical Manual Verification Plan**  
Ensures the EPs are proved to be suitable for use by the target audience.

**Technology Risk Reduction Assessment**  
Ensures technology risks and mitigation plans associated with a program are identified.

**TEMP**  
Test and Evaluation Master Plan documents plans and status of ensuring the system meets technical performance requirements and evaluating effectiveness, suitability and supportability. Reference: AR 70-1, DoDI 5000.2.

**TMETM/IETM**  
Technical Manuals, Electronic TMs and Interactive ETMs provide the instructions for operation and maintenance of a system. IETMs also provide integrated training and diagnostic fault isolation procedures.

**TFP**  
Total Package Fielding is the Army standard materiel fielding process for new or modified systems which provides a consolidated support package to user units. AR 700-142, DA Pam 700-142.

**TPS**  
Test Program Sets consist of test software, interface devices, and associated documentation. MIL-PRF-32070.

**Tradeoff Analysis**  
Early in system development cost, schedule, performance and supportability may be traded within the "trade space" between objective and threshold parameters to optimize.

**Training Concept**  
Defines the training philosophy for sustainment of the system. The concept addresses various types of training such as institutional and unit training.

**Transportability Report**  
Surface Deployment and Distribution Command-Transportation Engineering Agency (SDDC-TEA) provides transportability engineering assistance, deployment analysis assistance, design guidance, and required approvals to PMs, CBTDEVs, and other participants during system acquisition.

**TRR**  
Test Readiness Review ensures system under review is ready to proceed into formal test.

**TSM**  
TRADOC Systems Manager defines initial system supportability requirements. TRADOC R 71-12.

**Use Study**  
Analysis that considers mobility requirements, deployment scenarios, mission frequency/duration, basing concepts, service life, interactions with other systems, operational environment, and human capabilities/limitations to determine how a system will be used.

**Validate Computer Support**  
The ability to support any system should be demonstrated before the system is fielded. Software evaluation and prognostics/diagnostics will be demonstrated during a LD by fault insertion.

**Warranty**  
The purposes of a warranty in a Government contract are to delineate the rights and obligations of the contractor and the Government for defective items and services and to foster quality performance without burdening the Soldier. The benefits to be derived from a warranty must be commensurate with the cost of the warranty to the Government.

**WSR**  
Weapon System Review ensures the system is properly sustained (through resourcing) throughout its lifecycle. WSR is conducted by HQDA annually in preparation for a POM or mini-POM.

**TC**  
The Type Classification ensures that materiel is acceptable for Army use prior to spending procurement funds at a Full Rate Production (FRP) Decision Review. Reference: AR 700-142, SB 700-20.