



# Introduction to Product Support Analysis (PSA) Course

Gain the instruction and practice to apply life cycle management processes to acquired systems, equipment and high-value physical assets. This introductory course provides training designed to provide an in-depth understanding of Product Supportability Analysis (PSA) disciplines as they relate to the five phases of Defense Acquisition Management System (DoDI 5000 Model). As an introductory course, there are no prerequisite requirements to attend.

## WHAT YOU GAIN

Upon completion, participants will be able to:

- Describe PSA integration within a systems engineering, integrated product team (IPT) environment
- Explain the PSA processes and the Logistics Management Information (LMI) that results from these analyses
- Apply critical PSA processes throughout the phases of acquisition and sustainment

## WHO BENEFITS

This course is designed for:

- Logisticians, engineers, maintenance planners and program managers from novices to experienced professionals
- Anyone involved with performing/reviewing PSA
- Military, municipal and commercial sectors

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## PSA course outline

This course provides 3 days of classroom instruction for a total of 24 training hours. The course incorporates instruction, demonstrations, and discussions supported by real world lessons learned and includes: training materials, lectures, supported by on-screen presentations, demonstrations, large group discussions, and a reference library of useful information and data.

This modular course has six instructional modules of varying lengths beginning with the introduction to the acquisition process and progresses through the remaining modules to provide a solid foundation of knowledge in today's current developments and requirements for Product Support Analysis. The course curriculum is provided below:

### Unit One: Supportability Overview

- Introduction to the acquisition process
- Determining capability requirements
- Determining Key Performance Parameters (KPP)
- Determining Key System Attributes (KSA)
- Determining supportability objectives
- Design Interface/Maintenance Planning role in supportability

### Unit Two: Materiel Solution Analysis

- Purpose of the MSA phase
- Analysis of Alternatives
- Product support strategy
- PSA Logistician role in the MSA phase
- Application assessments
- Identifying functional requirement sub-activities
- Baseline Comparison System Comparative Analysis Process
- Standardization and interoperability
- Systems Engineering Technical Reviews (SETR)
- SETRs that occur during Capitalize Materiel Solution Analysis (MSA) phase

### Unit Three: Technology Maturation and Risk Reduction

- Purpose of the Technology Maturation & Risk Reduction phase
- Technology Development Strategy (TDS)
- Life Cycle Sustainment Plan (LCSP)
- Updating Product Support Analysis during the Technology Maturation and Risk Reduction phase
- Trade-off Analysis
- SETRs that occur during Technology Maturation and Risk Reduction phase

### Unit Four: Engineering & Manufacturing Development (E&MD)

- Purpose of the Engineering and Manufacturing Development (E&MD) phase
- Failure Mode, Effects and Criticality Analysis (FMECA)
- Fault Tree Analysis (FTA)
- Reliability-Centered Maintenance (RCM)
- Condition Based Maintenance Plus (CBM+) and Prognostic and Health Management (PHM)
- Level of Repair (LORA) process
- Maintenance Task Analysis (MTA)
- Early Distribution Analysis
- Supportability Test and Evaluation (ST&E)
- SETRs that occur during Engineering and Manufacturing

Development (E&MD) phase

### Unit Five: Production and Deployment/Operations and Support

- Purpose of the Production and Deployment/Operations and Support phases
- Initial Operational Test & Evaluation (IOT&E)
- Physical Configuration Audit (PCA)
- Engineering Change Proposal (ECP)
- Technical Directives (TD)
- Supply support
- Diminishing Manufacturing Sources and Material Shortages (DMSMS)
- Packaging, Handling, Storage and Transportation (PHS&T)
- Post Production Support (PPS) planning
- SETRs that occur during Production and Deployment phase

### Unit Six: Contracting for Product Support Analysis and Logistics Product Data

- Introduction to Logistics Product Data (LPD)
- Statement of Work (SOW)
- Contract Data Requirements List (CDRL)
- Data Item Description (DID)
- Contracting best practices

