

CAPABILITY PRODUCTION DOCUMENT (CPD)

Lesson Summary

Lesson Outcome: Describe the flow of information into a Capability Production Document (CPD) and how the CPD influences the Production and Deployment Phase of weapon systems acquisition.

Topic 1: CPD Significance

Leaner Outcome: Recognize the significance of a CPD.

The CPD specifies the performance the warfighter needs. To accomplish this goal, the CPD supports the Production and Deployment Phase of acquisition.

In other words, the CPD tells the acquisition community:

- The performance capabilities the warfighters need,
- How the warfighters will deploy the new product, and
- How the acquisition community and others will support that new product.

The CPD provides authoritative, testable capabilities for the Production and Deployment Phase of an acquisition program. The Requirements Manager must use the CPD to capture the information necessary to support:

- Production
- Testing
- Deployment of an affordable and supportable increment within an evolutionary acquisition (EA) strategy

The operational performance attributes in the CPD give direction to produce and deploy a single increment of a specific weapons system. Because the final CPD reflects the design approved at the system-level critical design review (CDR), it is not appropriate to introduce new requirements in the CPD. New requirements should be included in the next increment of an acquisition strategy, or delayed to a system upgrade or modification if no further increments are planned.

The CPD presents performance attributes, including Key Performance Parameters (KPP), to guide the production and deployment of the current increment.

The CPD must support Initial Operational Test and Evaluation (IOT&E) to help guarantee the acquisition process delivers effective weapons. The CPD must also support Milestone C and the Full-Rate Production (FRP) Decision Review.

Many sources provide input to the CPD. For example, the CPD must consider policy, joint concepts and the Concept of Operations, the operational threat, the Analysis of Alternatives (AoA), and previous capability documents.

Topic 2: CPD Associated Documents

Learner Outcome: Identify documents associated with developing a CPD and the documents a CPD impacts.

| Predecessor Documents and Information | Dependent Documents |
|---|--|
| Joint Operations Concepts (JOpsC), Concept of Operations (CONOPs), and supporting operations concepts | Acquisition Strategy (updated for Milestone C) |
| Critical Design Review | Acquisition Program Baseline (APB) for Milestone C of the current increment |
| System Threat Assessment | Confirmation of Clinger-Cohen Act (CCA) Compliance for IT/NSS |
| Information Support Plan (ISP) | DD Form 1494 (required to obtain spectrum certification) |
| Analysis of Alternatives (AoA) Report | Test and Evaluation Master Plan (TEMP) (updated for Milestone C) |
| Technical Standards Profile as Required by the DoD Architecture Framework | Integrated Support Plan (ISP) (updated for Milestone C) |
| ICDs | System Engineering Plan |
| CDD | Manpower Estimate |
| Test and Evaluation Master Plan (TEMP) from Milestone B | |
| DOD Enterprise Architecture and the solution architecture | |
| MUAs/final demonstration report for JCTDs and qualified prototype projects | |

The documents that depend on the CPD underscore the follow-on actions behind development and deployment. Here, the CPD affects the Acquisition Strategy, the Acquisition Program Baseline, the Test and Evaluation Master Plan (TEMP), the Integrated Support Plan (ISP), and the Manpower Estimate.

Topic 3: CPD Organization

Learner Outcome: Recognize the organization and sections of a CPD, and recognize the differences between the CPD and the CDD.

The JCIDS Manual specifies that the CPD should be no longer than 30 pages. The CPD begins with a two-page Executive Summary, a table of contents with a list of tables, figures and appendices, and a list of points of contact. Like the CDD, the CPD has a total of sixteen sections, three mandatory appendices, and additional annexes or appendices as necessary.

| CPD Sections | Section Description |
|-----------------------------|--|
| Executive Summary | Two pages maximum |
| Table of Contents | Includes lists of tables, figures and appendices |
| Points of Contact | Lists Key Contacts |
| 1–5 | Summaries |
| 6–10 | Systems and Supportability |
| 11–16 | Technology, Resources and Constraints |
| Appendices A–C | Mandatory Appendices |
| Other Appendices or Annexes | Additional Sections as needed |

The first five CPD sections are summaries. These sections are:

1. Capability Discussion
2. Analysis Summary
3. Concept of Operations (CONOPs) Summary
4. Threat Summary
5. Program Summary

Sections six through ten discuss the system under development and various elements of system support. Those sections are:

6. System Capabilities Required for the Current Increment
7. Family of System (FoS) and System of System (SoS) Synchronization
8. Information Technology (IT) and National Security Systems (NSS) Supportability
9. Intelligence Supportability
10. Electromagnetic Environmental Effects (E3) and Spectrum Supportability

Sections eleven through fifteen discuss system resources, schedule, constraints such as policy, other system attributes, and affordability. Those sections are:

11. Technology and Manufacturing Readiness
12. Assets Required to Achieve Full Operational Capability (FOC)
13. Schedule and IOC and Full Operational Capability (FOC) Definitions
14. Other DOTMLPF and Policy Considerations
15. Other System Attributes
16. Program Affordability

See the JCIDS Manual for specific differences between the CPD and CDD sections.

The three mandatory appendices are:

- A. Net-Ready Key Performance Parameter (KPP) Products
- B. References
- C. Acronym List

Appendix A, Net-Ready Key Performance Parameter (KPP) Products, is a series views or perspectives based on the Department of Defense Architecture Framework (DoDAF) introduced with the ICD.

Although the CDD and the CPD have very similar formats, the focus of the CPD is on producing and deploying a specific increment of a weapons system. Essentially, the CPD is one of the critical opportunities for the Requirements Manager to represent the warfighter to the acquisition community.

Differences Between the CDD and the CPD

| CDD | CPD |
|---|--|
| Focus on Development | Focus on Production |
| All increments | A specific increment |
| KPPs reflect the warfighters requirements | KPPs may be refined based on EMDD experience |

The CPD format is almost identical to the CDD format, but the intent of the two documents differ. The major difference is the update of KPPs and other performance attributes to reflect experience gained during the EMDD phase.

The CDD addressed design and development parameters for all increments. The CPD addresses the capabilities of a specific increment.