



Joint Capabilities and Integration Development System

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KPPs in EMD Phase

Threshold values may change between CDD and CPD

Precision of KPPs should increase in CPD

KPPs in CPD consider risk associated with:

- Manufacturing
- Other attributes

KPPs in CPD should be greater than or equal to KPPs in CDD



We covered KPPs in great detail in the Technology Development phase module. You should recall that we talked about KPPs, KSAs, threshold values, objective values, and tradeoffs. We also talked about the mandatory KPPs. So, in this presentation we'll talk briefly about why and how KPPs are updated during the Engineering and Manufacturing Development phase.

Remember, the Capability Development Document is approved at Milestone B and the Capability Production Document is approved at Milestone C. According to the JCIDS Manual, threshold and objective values may change between the CDD and the CPD.

The CDD attribute values are used to guide the acquisition community during the EMD phase. Threshold values should be based on what's achievable given the current state of technology. The objective values are based on a goal for the end-state of the system.

During the EMD phase, tradeoffs are made between the threshold and objective values to optimize performance. The tradeoffs are based on the available technology for the increment and the competing demands introduced by combining subsystems into the overall system. After the Critical Design Review, these tradeoff decisions are essentially completed. This should result in more precise KPPs for the Capability Production Document.

Threshold values in the EMD phase, which known as production values, should be determined based on manufacturing risk and the risk imposed by other related attributes. KPP and non-KPP threshold values in the CPD should be equal to, or better than, the corresponding CDD threshold values. But there may be cases where CDD KPP or non-KPP threshold values are lowered in the CPD.

If it looks like the KPPs may have to be lowered, then you should consider these four questions:

First, will the capability still provide sufficient military utility?

Second, if the new capability will replace a fielded capability, will it still provide more overall military utility than the fielded capability?

Third, is this capability still a good way to close the capability gap or should another materiel or non-materiel alternative approach be pursued?

And fourth, is the reduced capability worth the costs already incurred and any additional investments required?