

Improving the Process for Developing Capability Requirements for Department of Defense (DoD) Acquisition Programs

EXECUTIVE SUMMARY SEPTEMBER 2023

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EXECUTIVE SUMMARY

The Joint Capabilities Integration and Development System (JCIDS) is the Department of Defense's (DoD) formal requirements approval process. It is important to develop and validate joint warfighting capability needs as the basis for acquisition programs. However, for capabilities that need to keep pace with evolving technologies, process delays in requirements validation can cause commensurate delays in delivery of capabilities to the warfighter. The JCIDS deliberate path (as opposed to the JCIDS urgent path) is designed to strike a balance in speed and thoroughness but is often slow in practice.

In the FY 21 National Defense Authorization Act (NDAA), Congress expressed concern that JCIDS is too slow to keep pace with threats and technology, directing the DoD to develop recommendations for streamlining JCIDS. In support of the DoD's response, in 2022, the Acquisition Innovation Research Center (AIRC) modeled the JCIDS process and used the model to assess the effects of proposed process improvements [AIRC (2022)]. The 2022 AIRC study found that for a sample of 20 Navy programs, JCIDS staffing of a Capability Development Document (CDD) took an average of 336 days. The 2022 study also found that the Special Operations Command (SOCOM) had developed a streamlined requirements process that could reduce requirements review and approval times by more than 50%. The research team recommended that a SOCOM-like process be quantitatively assessed for speed, piloted in the Military Services, and, if successful, adopted for all but the largest acquisition programs as an alternative to JCIDS.

This report summarizes the follow-on analysis of the SOCOM process, verifying that it is indeed significantly faster than the JCIDS process. **The 15 Special Operations Rapid Requirements Documents (SORRDs) examined took an average of 85 days to validate compared to the 157 days on average for SOCOM to approve a full CDD** (N=5). Thus, the SORRD process is faster (about half as long) than its counterpart CDD process at SOCOM—and much faster (about a fourth as long) than the average of 336 days for 20 Navy CDDs examined in the prior study.

In discussing the SOCOM process with the Military Services in the current study, the research team learned that each Service has developed and implemented its own counterpart streamlined process for validating requirements for Middle-Tier Acquisition (MTA) programs, which are exempt from the JCIDS process by law. These Service and SOCOM streamlined processes have demonstrated much shorter times compared to JCIDS while meeting the basic needs of requirements document users in the acquisition and testing communities. Our assessment found sufficient evidence to recommend that the Joint Staff investigate delegating requirements validation to the Service streamlined processes for all programs other than Major Defense Acquisition Programs (MDAPs). Our team believes this recommendation is consistent with the statutory role of the Joint Requirements Oversight Council (JROC). To state the recommendation in implementable terms:

Recommendation 1. For all requirements whose anticipated solution is a non-MDAP acquisition program, regardless of Adaptive Acquisition Framework (AAF) pathway, the Joint Staff should consider accepting a streamlined Sponsor document received by the Joint Staff Gatekeeper as an acceptable alternative to a JCIDS document. The default Joint Staff Determination (JSD) category should be "Joint Information," with delegation of requirements validation to the Sponsor. In cases where a Joint Performance Requirement exists, the Joint Staff should participate as reviewers in the Sponsor's review and approval process. By exception, a documented JROC or Joint Capabilities Board (JCB) expression of interest may change the JSD category and require JROC or JCB approval. Such exceptions should be rare for non-MDAP programs.

The research team noted in this review that the Senate version of the FY 24 NDAA would direct the DoD to modernize the requirements process in ways that include streamlining for non-MDAP programs and would go well beyond that to require major restructuring of how requirements are developed and managed. If this becomes law, the DoD will have to make significant changes in the way the requirements process interfaces with the acquisition process. Today, that interface occurs through the systems engineering process. JCIDS is designed to interface with a linear, sequential systems engineering process with a handoff via the CDD. Systems engineering practice, however, is evolving to a more iterative, collaborative approach enabled by digital engineering tools and model-based methods for exploring trade space and optimizing designs. Mission engineering and capability portfolio management blur the lines between warfighter definition of capability needs and iterative engineering definition of solutions. Therefore, the research team recommends that the DoD plan for a joint effort by the requirements community and systems engineering community in modernizing the DoD requirements process in response to the FY 24 NDAA.

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This material is based upon work supported, in whole or in part, by the U.S. Department of Defense through the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) and the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) under Contract HQ0034-19-D-0003, TO#0480.

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