

## **Architecting a Development and Testing Plan for the Army's Common Operating Network**

**Christian Considine, Sean Crowley, George Gardner, Caulin Shannon, Michael J. Kwinn Jr. PhD, Steven Henderson PhD, and Paul Santamaria**

Department of Systems Engineering  
United States Military Academy  
West Point, New York

Corresponding author's Email: [sean.crowley@usma.edu](mailto:sean.crowley@usma.edu)

*The views expressed herein are those of the author and do not reflect the position of the United States Military Academy, the Department of the Army, or the Department of Defense.*

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**Abstract:** The ability to leverage information across a complex battlespace is one of the key elements that makes the U.S. Army a potent fighting force. The heart of this capability is a robust and adaptive tactical network that operates at every echelon. Efforts to improve the Army network over time have struggled with cost and schedule overruns as individual systems fail Army interoperability certification requirements. The Army acquisition community's shift to the Common Operating Environment (COE), promises a better system for ensuring timely network interoperability. Old habits and practices, however, threaten the promise of COE in terms of development and certification. This document examines current network development practices and recommends a new approach to COE for faster and cheaper certification. By utilizing an agile based approach, COE can be developed as a system of systems through iterative sprints that reduces time and resources required for certification.

**Keywords:** System of Systems, Testing and Evaluation, Scrum of Scrums, Common Operating Environment