



21<sup>st</sup> Annual NDIA Systems Engineering Conference

## Software Assurance Concept of Operations

### Advancing Software Assurance in the Modern Age – Part 2

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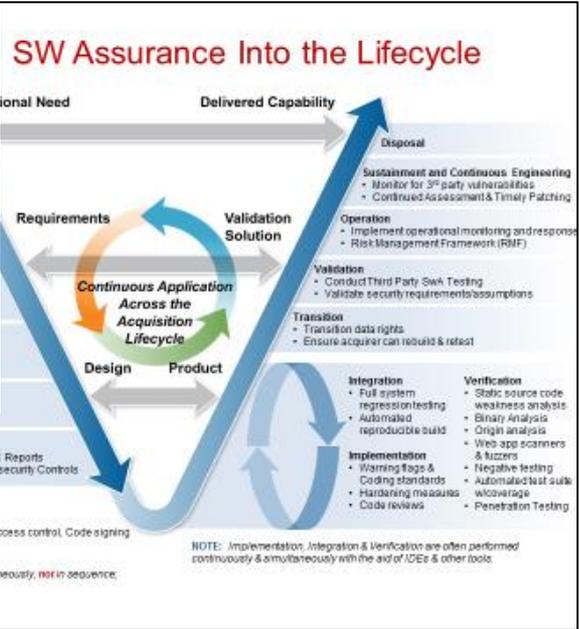
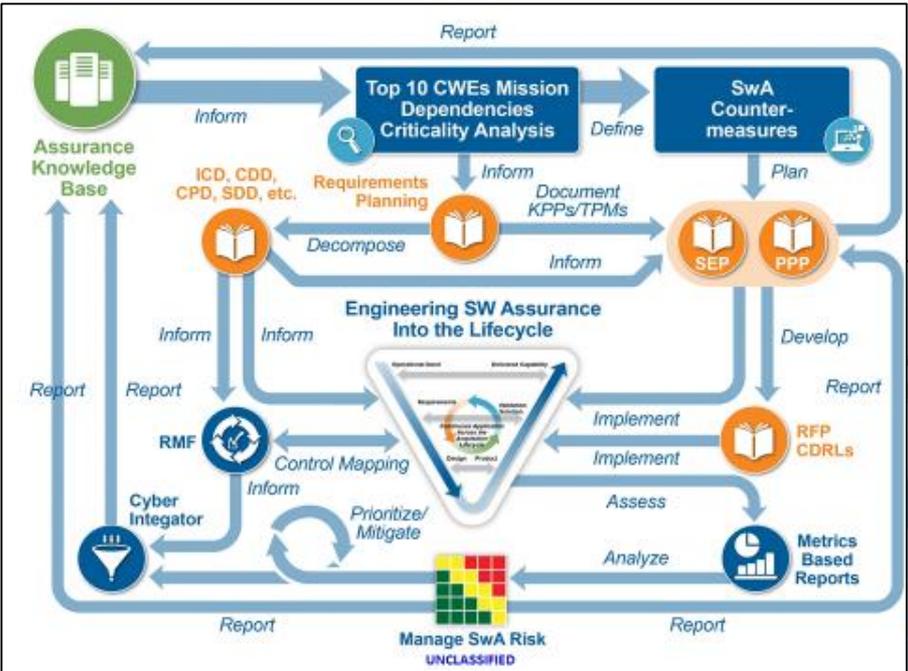
In Support for Office of the Under Secretary of Defense for Research and Engineering

October 2018





# Software Assurance Concept of Operations (CONOPS)



**System Analysis**

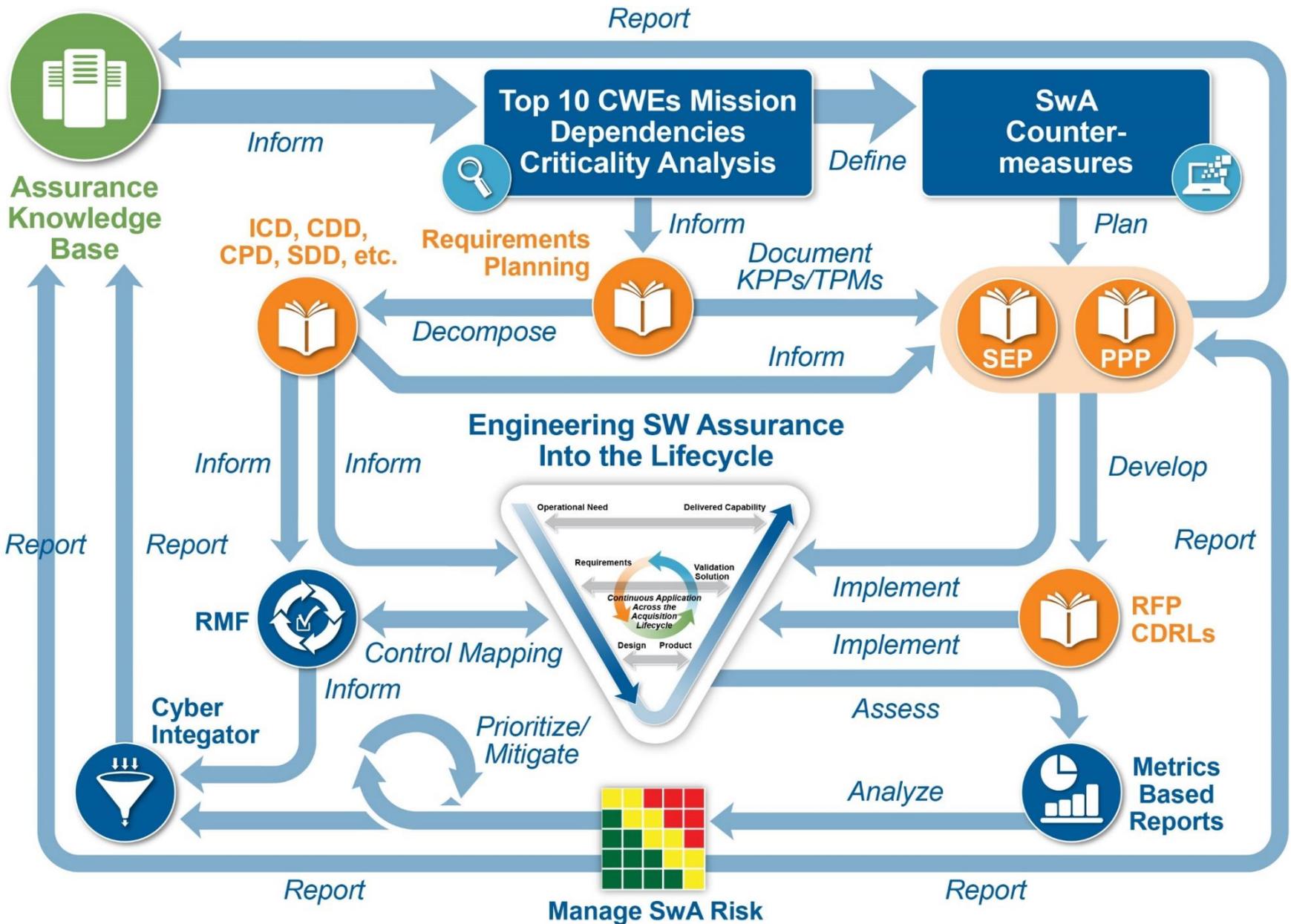
- Criticality Analysis
- SWA Evaluation of COTS
- Submission of TAG Reports
- Selection of Cybersecurity Controls

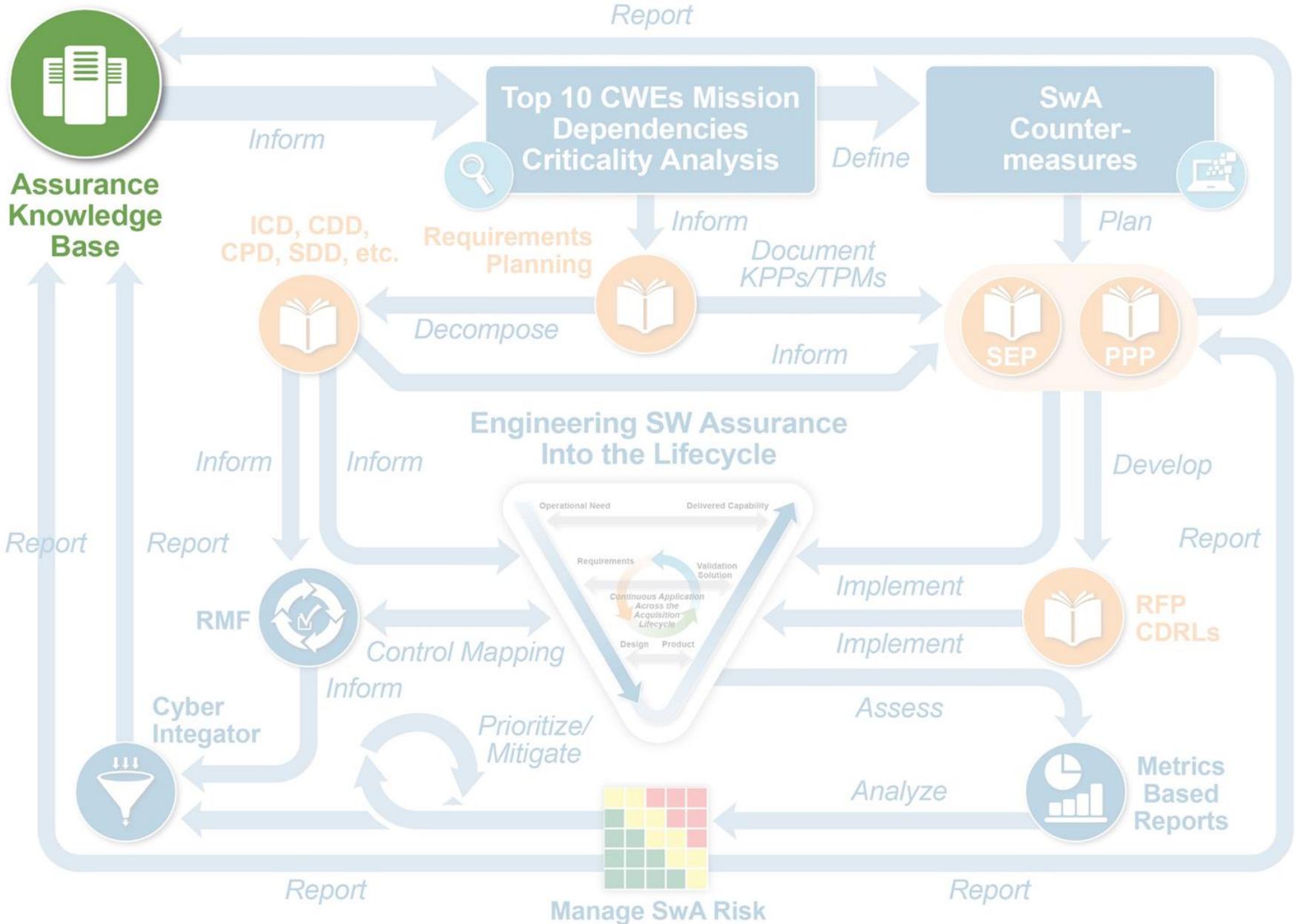
**SUPPORT:**

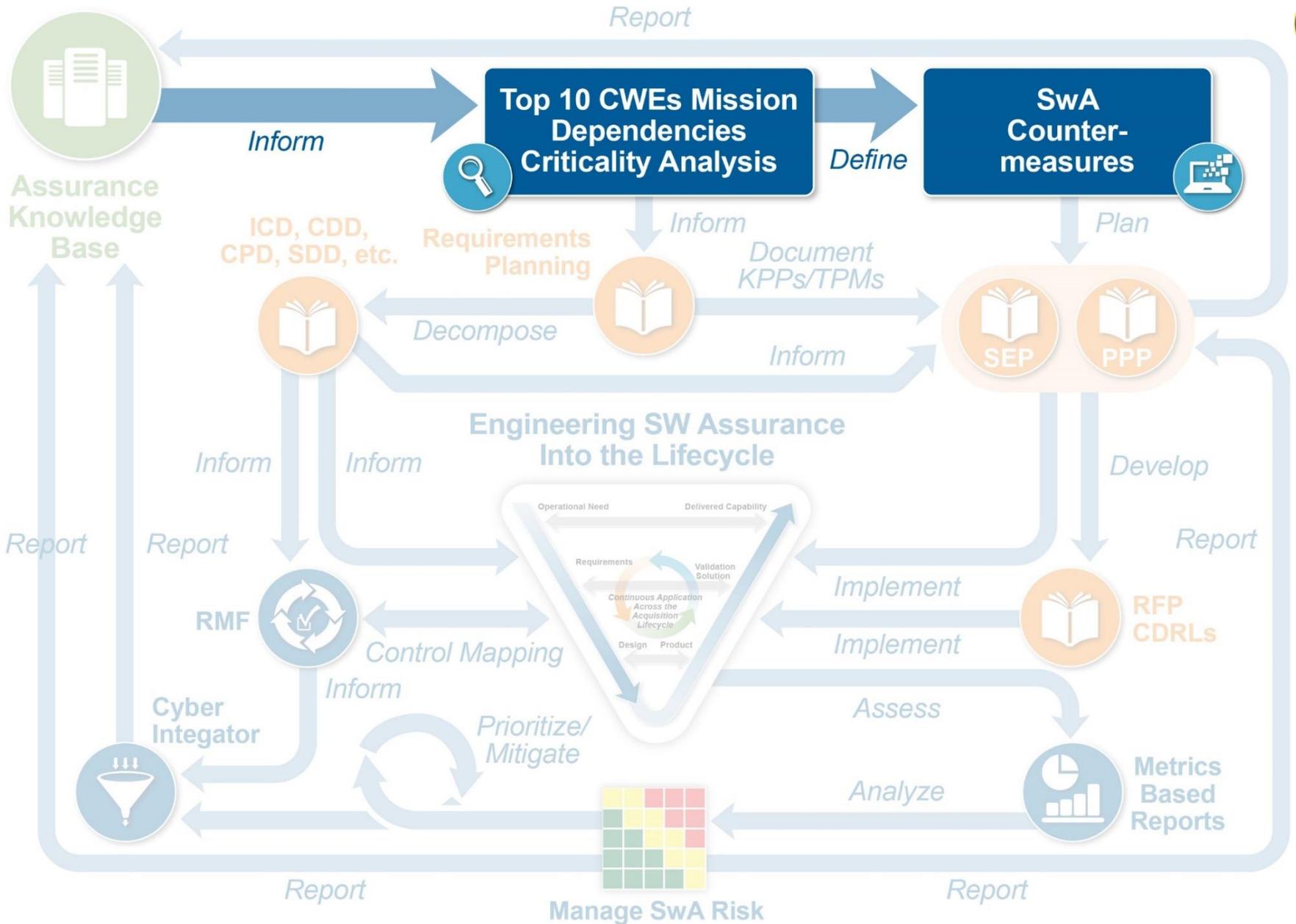
- Risk Management: Assurance case
- Configuration Management: Version control, Access control, Code signing
- Measures & Metrics

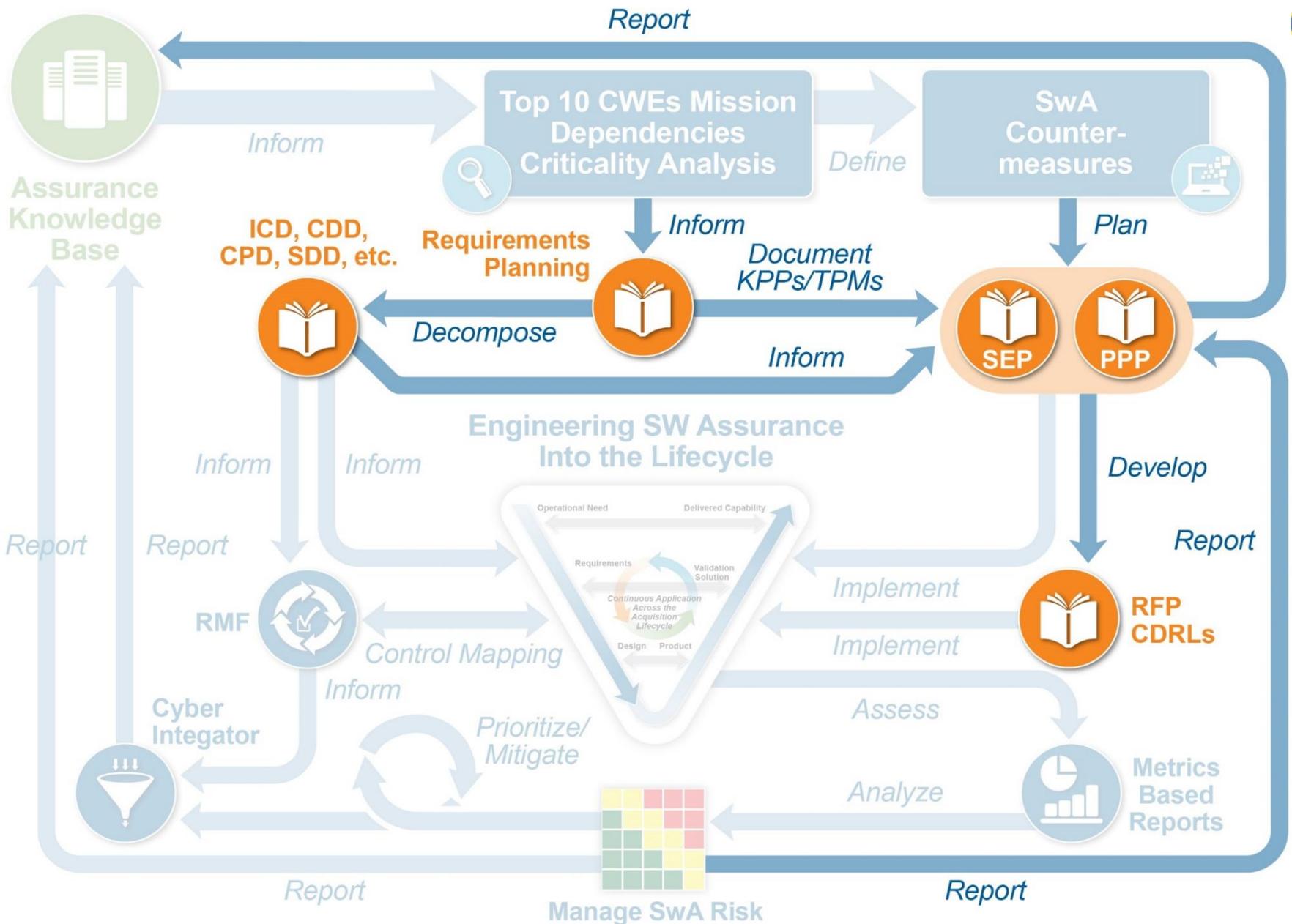
**NOTE:** Lifecycle processes typically occur simultaneously, not in sequence; see ISO/IEC 15205 & 12207

This CONOPS looks at the fundamental software assurance related processes that program managers should expect to see built in to a system's development lifecycle.

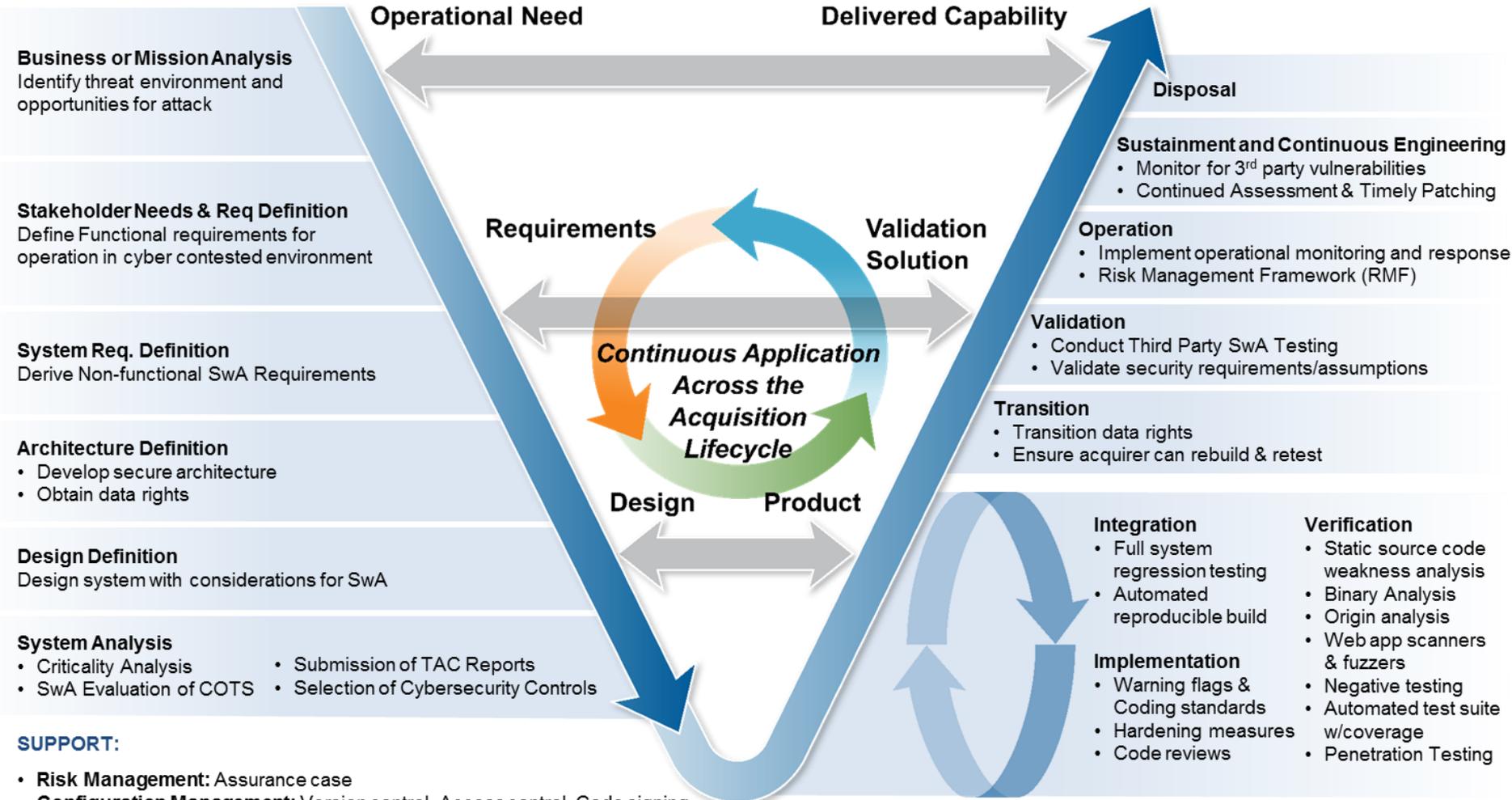








# Engineering Software Assurance into the Lifecycle



**NOTE:** Implementation, Integration & Verification are often performed continuously & simultaneously with the aid of IDEs & other tools.

**NOTE:** Lifecycle processes typically occur simultaneously, *not* in sequence; see ISO/IEC 15288 & 12207

