



DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

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MEMORANDUM FOR DISTRIBUTION

**SUBJECT: Software Process Improvement - Criteria for Systems Engineering
Technical Reviews**

Successful development and acquisition of software is paramount for acquiring Naval warfighting and business systems. The Software Process Improvement Initiative (SPII) was chartered in 2006 to implement process improvements that enhance our ability to develop and acquire software without sacrificing the cost, schedule and performance goals of our acquisition programs. A September 16, 2008 policy memorandum provided overarching guidance and promulgated a companion 'Guidebook for Acquisition of Naval Software Intensive Systems.'

Institutionalizing progress in software development and acquisition relies on the use of existing mechanisms wherever possible. The System Engineering Plan (SEP) and associated Systems Engineering Technical Review (SETR) processes provide the means to assess the health of software and hardware development throughout the acquisition timeline, and facilitate compliance with existing policies. Strengthening system engineering discipline in the acquisition process is also a priority of the Under Secretary of Defense (AT&L).

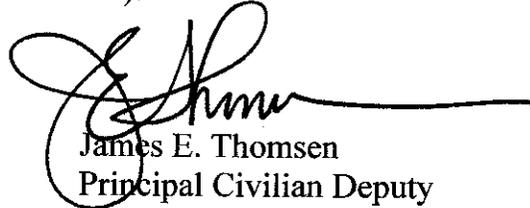
A supplement to the 'Guidebook' is attached and is promulgated with this memorandum. This supplement contains SETR criteria for software that are based on best practices from across the SYSCOMs. The criteria and guidance in the supplement:

- Document detailed best practices for Technical Authority and program staff use as they plan for software development and software engineering tasks, and assess the health and maturity of software across the acquisition lifecycle;
- Organize criteria within "artifacts and elements lists" to clearly implement policy requiring use of IEEE 12207, and provide core software metrics criteria showing what can be measured across the software lifecycle to comply with existing policy;
- Provide early measures of software technical maturity, particularly pre-Milestone B, to ensure effective early engineering to lower system Total Ownership Costs;
- Provide guidance on how to tailor the criteria to yield a reasonable set of useful criteria for various program sizes and acquisition environments; and

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- Facilitate reuse of technical evidence of software maturity across SETR events, Gate reviews, PoPS, WSESRB, and other required DoN technical certifications.

The point of contact for any revisions to this supplement, guidebook, or SPII policies is the Assistant Secretary of the Navy (Research, Development and Acquisition) Chief Systems Engineer (ASN (RD&A) CHSENG).



James E. Thomsen
Principal Civilian Deputy

Attachment:

As stated

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