



804 Based Core Metrics

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USD AT&L SSA

Software in Acquisition Workshop



ASN RDA Software Process Improvement Initiative (SPII)



- **This work is being done under the sponsorship and tasking of the ASN RDA Chief Systems Engineer's office**
- **Carl Siel's keynote briefing provided the overview, status and organization of the Navy SPII effort**
- **This work is contained within the efforts of the SPII Software Systems Engineering (SSE) focus team under the leadership of Joan Johnson from NAVAIR, NAWC WD China Lake with participation across the Naval enterprise**
- **Significant collaboration with the other focus team has been conducted and continues in the effort to develop the artifacts and process to develop these core metrics**

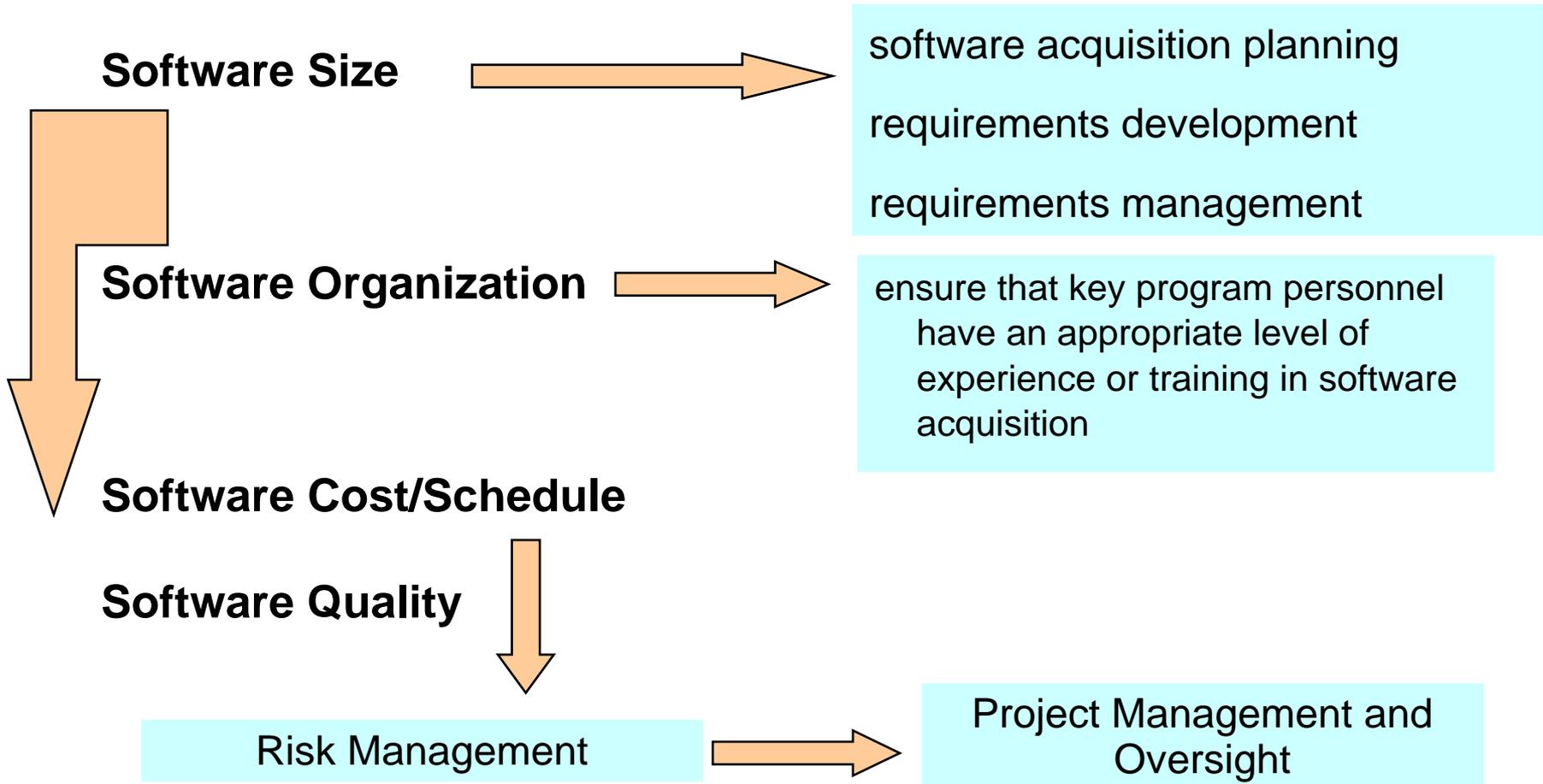
Public Law 107-314 Section 804



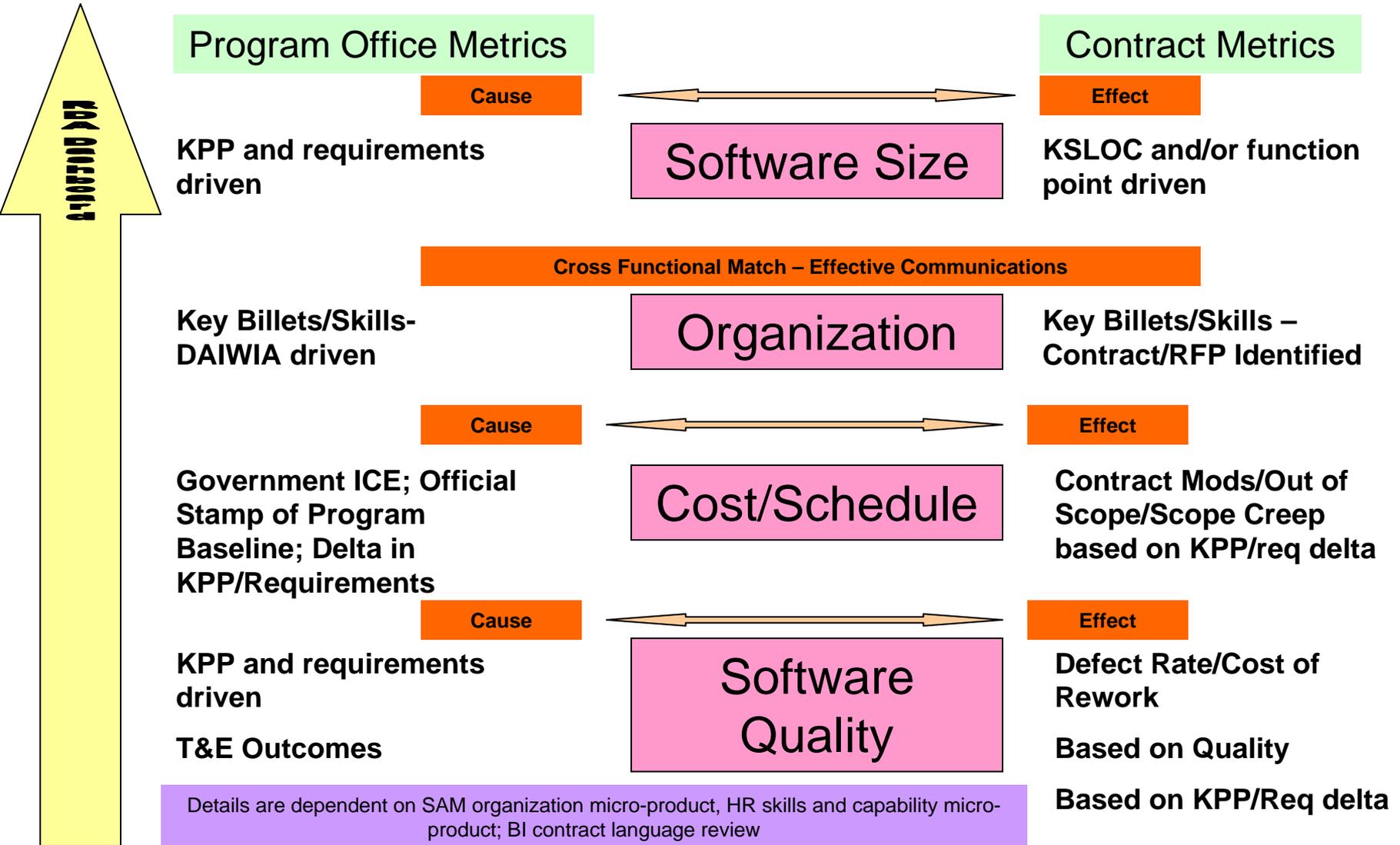
- **(b) PROGRAM REQUIREMENTS.** - A program to improve software acquisition processes under this section shall, at a minimum, include the following:
 - (1) A documented process for software acquisition planning, requirements development and management, project management and oversight, and risk management.
 - (2) Efforts to develop appropriate metrics for performance measurement and continual process improvement.
 - (3) A process to ensure that key program personnel have an appropriate level of experience or training in software acquisition.
 - (4) A process to ensure that each military department and Defense Agency implements and adheres to established processes and requirements relating to the acquisition of software.

Motivation for SPII Core Metrics

Efforts to develop appropriate metrics for performance measurement and continual process improvement.



SPII Core Measurement and Metrics



Mitigating Issues

- **IEEE 12207 Software Lifecycle and its family of related standards – 5 year revision cycles**
 - Other IEEE standards have been supplemented with **content maps** showing the extent to which the documents they prescribe conform with the information items of 12207.1.
 - At their respective five-year reviews, the standards will be revised so that the prescribed documents will conform
 - Content Maps to 12207.1

- 730, SW QA Plan
- 828, SW CM Plan
- 829, SW Test Plan, Procedure, Report
- 830, SW Requirements Specification
- 1012, SW V&V Plan
- 1016, SW Design Description
- 1058, SW Project Management Plan
- 1062, SW Acquisition Plan
- 1219, SW Maintenance Plan
- 1233, System Requirements Specification
- 1362, Concept of Operations Document

Mitigating Issues

- **ASN RDA November 2006 Policy Memo**
 - Requires a Software Development Plan (SDP)
 - 12207 based
 - Includes Contract language guidance

- **DoD Systems Engineering Technical Review (SETR) – integration of 12207 life cycle into the DoD 5000 life cycle (new DoD 5000 coming out soon)**

- **Systems Engineering Plan (SEP) Content – software organizational baselines**