Lockheed Martin
Integrated Systems & Solutions

A Large Appraisal?

Dennis A. Ring
SEI Lead Appraiser

M. Lynn Penn
Director Quality Systems & Process Management
IS&S Benchmarking Maintenance

Initial Benchmark
• SCAMPI C 6-9 months after ATP

One year after Initial Benchmark:

SCAMPI B
• All programs over $X contract value
• Some programs between $X and $X
  – FFP, numerous subs, not co-located team, high risk, corporate or IS&S visibility

SCAMPI C
• Non-SCAMPI B programs between $X and $X
• All programs (>$X) that are following the “primes” or “customers” processes
  – A PPS mapping is required and this is done for process risk determination

REVISITS depend on “Process Risks” identified in previous benchmark – ALL PROGRAMS VISITED EVERY TWO YEARS
Appraisal Characteristics

Method:
• SCAMPI V1.1 (ARC Class A)

Disciplines:
• Systems & Software Engineering, IPPD, SS

Models & Representations:
• CMMI V1.1 Staged Representation

Dates:
• October 2005
## Overview of Appraisal

### Appraisal Team Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tr>
<td>Gene Miluk (Lead Appraiser)</td>
<td>SEI</td>
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<td>Charlie Ryan</td>
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<td>Peter Capell</td>
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<td>Joanne O’Leary</td>
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<td>Dorna Witkowski</td>
<td>LM IS&amp;S</td>
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**Site Coordinators (LM IS&S):**  
Dick Warren  
Connie Czaplicki  
Mike LaBarge
The Challenge

- 200+ Programs
- 6 Lines of Business
- 15,000 Technical Employees
- Coast-to-Coast Locations

SEI CMMI Appraisal
Sampling Technique

The scope of the SCAMPI was the entire IS&S organization. Three programs represent more than 20% of the work distributed across all of the IS&S regions.

- AEHF
- IEC
- SBIRS (ground segment)

Through sampling, 27 other programs were offered into the appraisal to validate that the IS&S processes had been truly institutionalized. These programs will have full artifact libraries and completed binders available for the appraisal team’s validation. Sampling from these programs will increase the coverage to 73% of the IS&S bottom line.
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**Sampling Technique** (continued)

**Review of focus programs** allowed team to become familiar with terms, tools, and standard processes

Allocated specific process areas to **mini-teams**

Included additional programs **to broaden** the programs investigated to include all Lines of Business and multiple program types

**Reviewed program documentation** (already provided in binders)
  - Used familiarity from focus programs to craft questions confirming implementation and institutionalization

Conducted **additional interviews** with these programs
  - 10 additional programs
  - 42 additional people

Mini-teams presented findings to **full team for consolidation**
Sampled Programs

DE S&S
DMS
RSSI (P606, P707, P693)
Deepwater
P400
IDMO
TTWCS
DD(X) (DV)

Mini-Team #1
PP, PMC, IPM, RSKM

Mini-Team #2
SAM, ISM, IT, DAR

Mini-Team #3
REQM, RD, TS, PI, VER, VAL

Mini-Team #4
CM, PPQA, MA, QPM, CAR
Results of Broadening Coverage

- Found appropriate consistency of practices, tools, and processes across the additional programs
- No major weaknesses, issues, or concerns were found
- Increased team confidence in institutionalization across IS&S
List of Published SCAMPI Appraisal Results

ORGANIZATION NAME: Lockheed Martin Corporation
SPONSOR NAME: Walter Winkler
LEAD APPRAISER NAME: Eugene Miluk
SEI PARTNER: Software Engineering Institute
APPRASIAL END DATE: 10/14/2005
MATUREITY LEVEL ASSIGNED: 5
APPRaised ORGANIZATIONAL UNIT:
   Entity Name: Integrated Systems & Solutions
   Location(s): King of Prussia, PA
CMMI MODEL USED: CMMI-SE/SW/PPD/SS, V1.1, Staged
APPRaisal METHOD USED: SCAMPI v1.1

MODEL SCOPE & CAPABILITY RATINGS ASSIGNED:

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http://seir.sei.cmu.edu/pars/pars_display.asp?i=1049
Questions ?