



Institute for Defense Analyses
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Resolving CMMI Issues

**CMMI Technology Conference
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- Programs execute at lower maturity levels than their organizations have achieved and advertised
- High-maturity practices are not consistently applied at the project level after contract award
- New projects do not always incorporate the organization's CMMI-appraised processes
- Content of Appraisal Disclosure Statements (ADS) is lacking
- Appraisal sampling procedures do not ensure adequate coverage of the organizational unit
- Appraiser quality not always consistent– training, etc.
- Lack of agreement on what constitutes Levels 4 and 5
- Need to converge to a single representation
- Inadequate training and education for acquirers
- Should CMMI be used for source selection?

➤ Issue

- ❖ Programs execute at lower maturity levels than their organizations have achieved and advertised

➤ Resolution

- ❖ Defense Contract Management Command (DCMA) has begun data collection on program performance



Project Implementation of Appraised Processes

➤ Issues

- ❖ High-maturity practices are not consistently applied at the project level after contract award
- ❖ New projects do not always incorporate the organization's CMMI-appraised processes

➤ Resolution for v. 1.2

- ❖ Eliminated “level for life”—now a 3 year limit
- ❖ Added a specific goal and two specific practices to the Organizational Process Focus (OPF) process area (PA) of the model to stress deployment of processes to projects
- ❖ Added words to a specific practice in Integrated Project Management (IPM) PA to emphasize having a defined process at project start-up



Appraisal Disclosure Statement (ADS)

➤ Issue

- ❖ Content of Appraisal Disclosure Statement (ADS) is lacking

➤ Resolution for v. 1.2

- ❖ Much more detail disclosed in v. 1.2 ADS than previous versions
 - Organizational unit, focus and non-focus projects, application domains
- ❖ Lead Appraisers must certify that focus and non-focus projects are truly representative
- ❖ Lead Appraisers must certify that level 4 and 5 appraised subprocesses map to organization's business objectives
- ❖ All appraisals performed after 28 Nov 2006 must report with v. 1.2 of the ADS, regardless of model or method used
- ❖ DoD contractor's ADS will be posted on a .mil web site

➤ Issue

- ❖ Appraisal sampling procedures do not ensure adequate coverage of the organizational unit

➤ Resolution for v. 1.2

- ❖ New sampling rules and disclosure in Appraisal Disclosure Statement (ADS)

- Organizational Scope: name, type, location
- Organizational Unit Coverage: size, application domain, geographical breadth, project type expressed in percentages of total organizational unit

➤ Issue

- ❖ Appraiser quality not always consistent— training, etc.

➤ Resolution for v. 1.2

- ❖ Upgrade face-to-face training with focus on integrity
 - Sessions held at this conference
- ❖ Certification of high-maturity appraisers in place
 - Workshop on high maturity training determined the requirements for which the lead appraisers have to provide evidence in order to do high maturity appraisals
 - Previous courses, oral questions, etc

- Issue
 - ❖ Lack of agreement on what constitutes Levels 4 and 5
- Resolution for v. 1.2
 - ❖ Body of Knowledge on high maturity will be developed and available by October 2007
 - What constitutes high maturity behavior?

➤ Issues

- ❖ Inadequate training and education for acquirers
- ❖ Should CMMI be used for source selection?

➤ Resolutions for v. 1.2

- ❖ Completion of Guidebook for Program Managers
 - *Understanding and Leveraging Your Contractor's CMMI Efforts: A Guidebook for Acquirers*
 - Due out after the first of the year—February 2007
- ❖ Development of the CMMI for Acquisition Constellation (CMMI-ACQ)
 - Initial draft model developed by General Motors and the SEI
 - Involvement of broad acquisition stakeholder community through pilots and as key reviewers
 - CMMI-ACQ model and training to be available by end of April 2007



Summary Issues—Addressed in V. 1.2

- ✓ Programs execute at lower maturity levels than their organizations have achieved and advertised
- ✓ High-maturity practices are not consistently applied at the project level after contract award
- ✓ New projects do not always incorporate the organization's CMMI-appraised processes
- ✓ Content of Appraisal Disclosure Statements (ADS) is lacking
- ✓ Appraisal sampling procedures do not ensure adequate coverage of the organizational unit
- ✓ Appraiser quality not always consistent— training, etc.
- ✓ Lack of agreement on what constitutes Levels 4 and 5
- Need to converge to a single representation
- ✓ Inadequate training and education for acquirers
- ✓ Should CMMI be used for source selection?

- Need to converge to a single representation

- Issues addressed in v. 1.2 product suite still need to be monitored to ensure improvement goals are really being met
 - ❖ Integrity of appraisals
 - ❖ Quality of the product suite
 - ❖ Education of acquirers
 - ❖ Opportunities for streamlining where appropriate

- Ensure constellations don't become stovepipes
- Monitor outstanding issues—DCMA continues to investigate
 - ❖ Programs execute at lower maturity levels than their organizations have achieved and advertised
- Continue to address
 - ❖ Lack of agreement on what constitutes Levels 4 and 5
 - ❖ Need to converge to a single representation



Additional Improvement Opportunities

- Lean the Model
 - ❖ Convene 6-sigma team to analyze
 - ❖ Eliminate cumbersome material included for legacy reasons
 - ❖ Move forward from legacy representation approach to focus on measuring process capability with translation to organizational maturity
- Next Generation Process Improvement (PI)
 - ❖ Develop a strategy for how we will take PI to the next level
 - ❖ Do we need something else with CMMI for high maturity?



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Questions/Comments?
