



Lessons Learned  
on  
Cooperative  
Government/Industry Appraisals  
*aka Registered Appraisals*

Melanie G. Benhoff  
Integrity Applications, Inc  
[mbenhoff@integrity-apps.com](mailto:mbenhoff@integrity-apps.com)



**Carnegie Mellon**  
**Software Engineering Institute**



# Cooperative Appraisals

## 1 A definition:

- Government members or representatives participate on a corporate assessment
- Goal is to establish additional confidence in impartiality and objectivity of assessment results
- Results signed by government members to assert that objective appraisal process was used in conformance with the instrument's method description
- Results (including findings) “registered” with SEI
  - Registration “certificate” confirms “fact of” and receipt of appraisal materials / details / results and compliance with defined appraisal process
  - May be useful in lieu of customer conducting their own evaluation of the appraised organization





# Impetus for Initial Interest in Cooperative Appraisals

- 1 OSD Policy, Jan 2001, requiring Level 3 Evaluation in order to compete for DoD Acquisitions
  - Not corporate assessment, but government (or representative) evaluation
  - ACAT1 programs, but some services applying policy to other programs
- 1 Discomfort/unwillingness to rely solely on corporate appraisals for understanding corporate capabilities & process maturity
- 1 Resources and schedule implications on government evaluations during source selections

**Program Offices could accommodate best practices / policy influences through increased collaboration in corporate assessments for process improvement**





# Collaborative or Registered Appraisals

- 1 Appraisers representing government offices participate on corporate assessments as equal member of appraisal team
  - Trained/qualified appraisers supplied and sponsored by government office
- 1 Results “registered” with SEI
  - Contractor can make registered results available to prospective customers/government offices
  - Could be used in lieu of SCE-like evaluation for acquisition while retaining objective perspective of appraisers not sponsored by corporate organization





# Who can be a “Government” Member of Cooperative Appraisal Team?

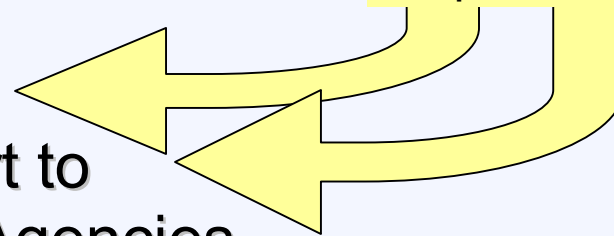
## 1 Government employee

- Program office member
- DCAA rep
- DCMA rep
- Other

## 1 FFRDC

## 1 CAAS/SETA Support to Program Offices or Agencies

As long as no consulting relationship to appraised organization for process improvement implementation



### Key Criteria

- Proper training and experience
- Participation Sponsored By (Paid for By) Government Agency





# Role of Government Representatives on Appraisal Team

- 1 Understand corporate objectives for appraisal
- 1 Bring experience / appraisal knowledge/ model knowledge as full-fledged member of appraisal team
- 1 Fulfill responsibilities as full-fledged appraisal team member
  - Not merely an observer of the appraisal team
  - Ensure their vote/voice counts as much as every other appraisal team member
- 1 After appraisal:
  - Sign registered appraisal forms
    - Attesting to completeness/validity of process used for appraisal
  - Respond to questions from prospective “consumers” of appraisal information during next 2 years
    - Government program offices seeking maturity level information in support of acquisition





# 1<sup>st</sup> Registered Appraisal -- Context

- 1 First cooperative appraisal conducted Summer 02
  - Appraisal Method: SCAMPI V 1.1
  - Reference Model: CMMI SE/SW, Staged, Level 5
- 1 Scope of appraisal, Lockheed Martin, M&DS
- 1 Size of team: 6
  - 3 of the 6 were SEI-authorized lead appraisers
  - 2 of the 6 were SCAMPI lead assessors
- 1 “On Site” Window:
  - 3 days team training/readiness review
  - 10 days of on-site appraisal activities





# Factors Affecting Effectiveness of Cooperative Appraisal

- 1 Early identification and involvement of Government appraisal team members
- 1 Planning
- 1 Qualifications of team members
- 1 Composition/Responsibilities of mini teams
- 1 Interpersonal dynamics of appraisal team members
- 1 Readiness of the appraised organization







# Lessons Learned <sup>1</sup>

- 1 Early Identification/Acceptance of Government Appraisal Team Members (6 months or longer before appraisal)
  - Ensure entire appraisal team is balanced/optimized
  - Will drive appraisal team approach
    - Match mini teams to complement experience/expertise of all appraisal team members
    - Organizational overviews and documentation needs
  - Allows for optimized PA assignments
  - Preserves appraisal schedule with early lock-in
  - Allows time to identify and resolve any training needs
  - Allows time to look for alternatives if nominee lacking critical training/experience





# Lessons Learned <sup>2</sup>

## 1 Effective Planning

- Involve government-sponsored appraisal team members **AS EARLY AS POSSIBLE** in corporate planning activities
  - Helps build shared understanding of corporate objectives and expectations
    - Senior management's focus on process improvement and maturity level rating
    - Historical background of organization in their process journey (what has worked, what hasn't)
  - Address team building, training, appraisal focus issues early without disruption to corporate assessment plans





# Lessons Learned <sup>3</sup>

- 1 Qualifications of Government Team Members
  - Must have strong experience with formal appraisals
    - Must be a lead appraiser or candidate lead appraiser
  - Must have strong foundation with reference model
    - Experience using same model in appraisals
  - Must have ample experience with relevant development & engineering activities
    - 10-15 years system development
    - Similar business/technical domain a plus

**Government Members represents credibility of appraisal to other Government Agencies**

∇ *the credibility of their affirmation is limited by their credibility as an appraiser*





# Lessons Learned <sup>4</sup>

## 1 Composition/Responsibilities of Mini Teams

- SCAMPI concept of mini-teams does not directly support concept that government members of cooperative assessments can attest to process and be comfortable with results
  - Mini-team activities can be much more diffused than in CBA-IPI or SCE
    - Allows for more “in-parallel” data gathering and consolidation
  - Make sure Appraisal Plan allows for sufficient “in serial” data gathering and processing to accommodate Registered Appraisal objectives
  - Make sure team data consolidation and consensus activities allow for sufficient time to share information across mini-team
    - Mini Teams responsible for justifying characterizations at project level to rest of the team during consensus...
      - 1 Not just counting types/pieces of objective evidence
    - “Red-teaming” project characterizations across mini-teams in preparation for team consensus...





# Lessons Learned <sup>4</sup> (continued)

## 1 Composition/Responsibilities of Mini Teams

- Put considerable thought into how to organize mini teams given participation of government representatives
  - Most controversial PA's will be those at higher maturity levels
  - Government members will have less familiarity with organizational aspects of processes
- Don't put government members on same mini team
- Don't put government members only on less controversial or less stringent PA's
- Don't organize mini teams by maturity level
  - Doesn't balance work across mini teams
- Consider organizing mini teams by process category or some other method to balance appraisal work by a conscious theme
  - Project Mgmt (6)                          Engineering (6)
  - Process Mgmt (5)                          Support (5)





# Lessons Learned <sup>5</sup>

- 1 Interpersonal Dynamics of Appraisal Team Members
  - High probability government members have not been on an appraisal with rest of team members before
  - High probability government members not as familiar with organization's policies, standards, processes, terminology, etc as rest of team (*which more than likely will have experience appraising this organization*)
    - Team building and team communication is crucial to successful appraisal
    - Make time for these tasks during planning and training activities
  - Model interpretations need to be normalized across team
    - Even with team of well-qualified, experienced evaluators
  - Objective evidence interpretations and definitions of sufficiency need to be consistent and reasonable
    - What's a Direct Artifact versus Indirect Artifact versus Direct Affirmation?
    - What kind of objective evidence is sufficient to demonstrate "fully implemented"?
      - One direct artifact (i.e. minutes from one meeting)? There are many types of direct artifacts... so what will be sufficient





# Lessons Learned <sup>6</sup>

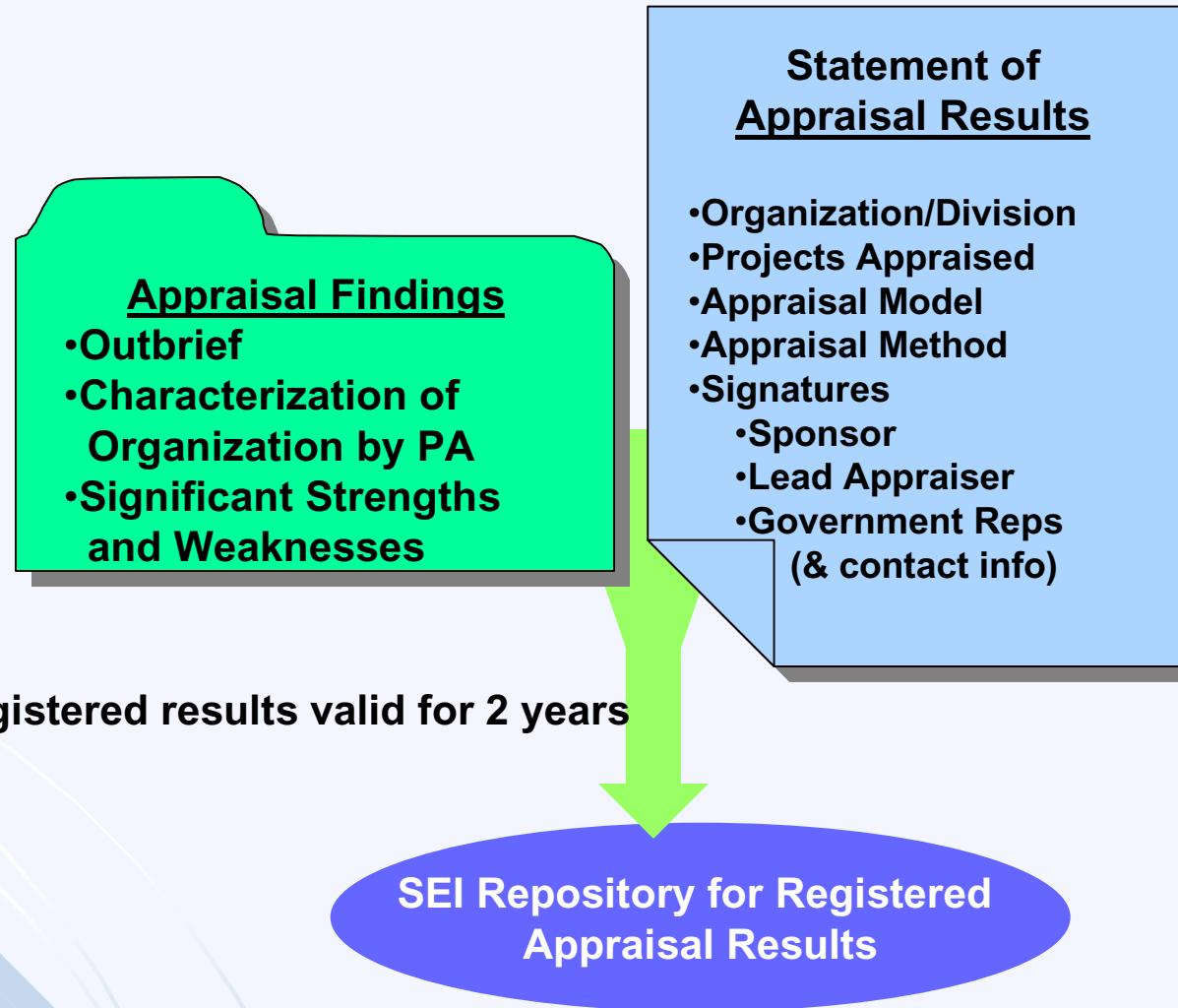
- 1 Readiness/Maturity of the Appraised Organization
  - Meeting the intent of the model as well as the “letter of the law”
    - Conservative Mapping of Organization/Project Processes and Artifacts to Model
    - Organization doesn’t try to stretch processes to apply to higher level process areas
  - Availability of additional objective evidence and people to respond to appraisers’ questions
    - May be more questions/info requests than in typical corporate assessment
  - Organization welcomes an objective appraisal







# Output of Registered Appraisal\*







# Remaining Policy Issues

- 1 Degree to which registered appraisals used in source selections
  - Education/awareness/motivation
  
- 1 FAR implications for competitions
  - If not all offerors in acquisition have cooperative appraisal results available/registered
  
- 1 Near term staffing drain on government agencies to get initial cooperative appraisals registered
  - Rely on FFRDCs and CAAS/SETA





# Summary

- 1 Age-old question: Does sponsorship and appraisal team composition affect outcome/results of appraisal?
- 1 Age-old constraints:
  - Staffing/resource constraints for implementing OSD policy
  - Impact of Government Class A appraisals on acquisition schedules
- 1 Solution sets:
  - Other than SCAMPI Class A Appraisals
    - SCAMPI Class B Appraisal Evaluation Method (*to be defined early 03*)
    - System / Software Risk Evaluations
    - Process Benchmarking Evaluations
    - .....
  - Cooperative Government/Industry Appraisals with Registered Results

