

# CMMI Update Beyond V1.2...

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August 7, 2007





# CMMI Transition Status

## As reported to the SEI as of 6-30-07 -1

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### Training

Introduction to CMMI – 70,791

Intermediate CMMI – 2,549

Introduction to CMMI Instructor – 504

SCAMPI A Lead Appraiser – 731

SCAMPI B&C-Only Team Lead – 33

Understanding CMMI High Maturity Practices –120

### Authorized

Introduction to CMMI V1.2 Instructors – 400

SCAMPI V1.2 Lead Appraisers – 417

SCAMPI B&C V1.2 Team Leads – 20



# Questions to Guide Discussion



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Do we need something different or additional to define High Maturity (i.e. CMMI Level 4 & 5)?

How can we "slim down" the CMMI models while still preserving integrity?

Can we likewise "slim down" the Appraisal method?

Can we eliminate the Staged representation?

Is the CMMI v1.2 Constellation Strategy the right approach?

Can we identify "next-generation" process improvement methodology?

Can CMMI be harmonized with other continuous process improvement efforts?

Can repeatability, consistency and overall model and appraisal methodology be improved?

Are there "breakthrough" concepts that we can apply to overall process improvement?



# Can CMMI be harmonized with other standards and continuous process improvement efforts?

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Agree that harmonization should be a goal, but should not slow progress too much

Harmonization efforts take time

- (This may be the only formal harmonization effort) Currently, 15288 being harmonized with 12207 (ongoing several years). There is a move to say “either or”. Recent work in this area to come out soon.

Are there “standards” we want to focus on?

- Standards
- Process Improvement Methods
- 9001, 14000 (environmental standard), AS 9100, FAA Standard (Aviation Critical Safety Items), 15288, 12207, 15504, ITIL, COBIT, Sarbanes-Oxley, 632 (Systems Engineering), 1220, Malcolm Baldrige, Six Sigma [not all standards here are at the same level of abstraction], PM BOK and OPM3



# How can we "slim down" the CMMI models while still preserving integrity?

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How can we make this more user friendly?

Can we slim down for small projects? Can the model have some scalability according to various factors (e.g., project size, PoP, organization size)?

**How do focus areas fit in with the model?**

Consider options for packaging (remove redundant stuff or repackage better)

Consider fundamental, intermediate and advanced volumes

Consider architectural views more appropriate for the different using communities



# How can repeatability, coverage (scope) and consistency of the model be improved?

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## Coverage (Scope)

- Areas for consideration
  - Operations, Support, Transition to operations, Deployment, Disposal, Pre-project, Proposal, sustainment, transition to production, production/manufacturing, training
  - Better coverage of maintenance and technical reviews
  - Safety, security, dependability, systems assurance, environmental
  - Strategic planning, enterprise management, enterprise architectures, enterprise investment strategies, finance
  - Work force management and development
  - IR&D, Advanced technology, advanced technology test bed or lab environment
  - Small settings
  - Product lines
  - Business practices
  - Information management (both enterprise and project)
  - “Systems of systems” and their acquisition



# What representation should we have (e.g., Staged, Continuous)? -2

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How can we make two representations fit the same model?

If the model is expanded to handle additional scope, then we may need to consider changes in the way appraisal results are presented due to sponsor driven time constraints [packaging]

- How do we slim at the same time as providing better understanding and cover all the things that are need?
- As you expand scope, do you need to abstract concepts versus mega model?
- [Scope, slimming] Need a vision and plan for model evolution
  - Consider a “fixed size” approach and looking at ways to present the remaining information

Consider pulling out OPF and coupling it with levels 4 and 5

**Don't need to cover everything in the same model (packaging)**



# Is the CMMI v1.2 Constellation Strategy the right approach?

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Alternative approach: Start with a CMMI Model Framework (CMF) and add where you need to expand scope (+ concept)

Are there differentiators for constellations?

Instead of creating constellations, encourage projects to do what makes sense with respect to what they are doing using the parent model

- Consider looking at lifecycle and what is needed at each phase
- Can the unsophisticated tailor the parent model for their perspective?

How multiple constellations can be used in an organization for improvement and appraisal?





# Can we identify "next-generation" appraisal methodology? Are there "breakthrough" concepts that we can apply to overall appraisals?

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Delta appraisal, continuous, incremental, using measures to judge satisfaction, leading indicators, process performance measures, program health (versus process health), 15504 (SPICE), EIA 732 (percentage of practices performed, effectiveness of generic attributes)

Data reuse from previous appraisals

Appraisal by parts

- Example, OSP separate from projects
- CMF separate from model components unique to constellations
- Certify processes instead of model (e.g., EV or SEMP)
  - Sponsor commits to ongoing process improvement



# Next Steps...



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Send us your ideas

- Form available on-line from SEI
- Submit like a Change Request

Open Discussion.....

