

CMMI® Interactive!

NDIA Systems Engineering Division

CMMI Working Group

November 19, 2008

NDIA CMMI® Working Group



Charter

- Collect and provide a broad-based, representative viewpoint on issues relating to CMMI-based process improvement within NDIA member companies
- Advise NDIA SE Division and CMMI Steering Group on CMMI Product Suite content, issues, and strategies for implementation, appraisal, and training with recommendations to optimize the leverage of CMMI investments in government and industry

Membership

 Representatives from industry, government, academia, and SEI (see membership list)

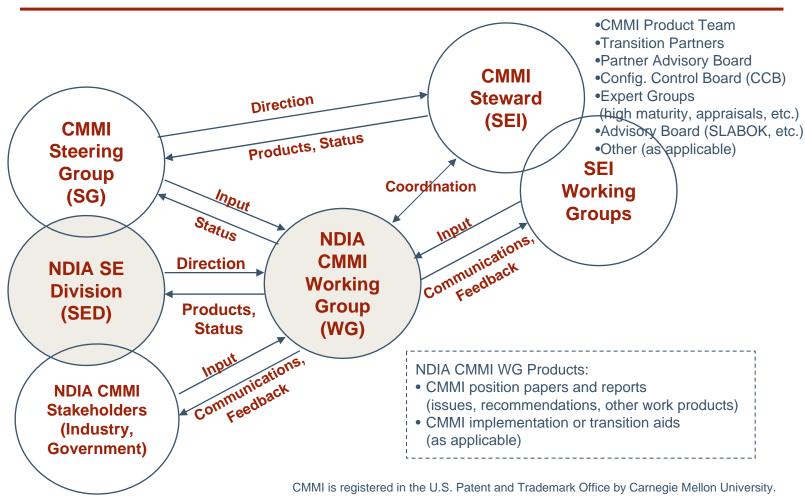
Tasking

- Respond to requests for input from CMMI Steering Group (product reviews, position papers, recommendations, feedback)
- Provide bi-directional communications and feedback from CMMI community

CMMI is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

NDIA CMMI® Working Group Interfaces and Work Flows





CMMI WG Membership



Name	Organization	
Jim Armstrong	Stevens Institute	
Karen Bausman	USAF AFIT	
Dan Blazer	SAIC	
Geoff Draper (lead)	Harris Corporation, Govt Communications Systems Division	
Jeff Dutton	Jacobs Technology Inc.	
Nancy Fleischer	Raytheon	
Ray Kile	Lockheed Martin, Systems and SW Resource Center (SSRC)	
Dawn Littrell	L-3 Communications	
Wendell Mullison	General Dynamics, Land Systems	
Randy Walters	Northrop Grumman Mission Systems, C2 Systems Division	
Jon Gross	Software Engineering Institute (SEI)	
Mike Phillips	Software Engineering Institute (SEI)	
Karen Richter	Institute for Defense Analyses (IDA)	

CMMI WG Organization



Subteam	Summary Objectives	Membership
High Maturity (HiMat) Subteam	•Respond to SG priority direction on HiMat issues •Provide industry input on CMMI L4-L5 model issues and process improvement benefits	Randy Walters (lead - NG) Wendell Mullison (GD) Jim Armstrong (Stevens) Ray Kile (LM) Dan Blazer (SAIC) Dawn Littrell (L-3 Com) (Karen Richter: OSD liaison)
CMMI Survey Subteam	•Collect broad-based industry feedback on CMMI via conference sessions	Geoff Draper (lead - Harris) Jeff Dutton (Jacobs) Karen Bausman (USAF)
CMMI Performance Subteam	•Quantify CMMI performance improvements •Linkage between CMMI MLs and program performance	Jeff Dutton (lead – Jacobs) Karen Bausman (USAF) Wendell Mullison (NG) Randy Walters (NG)

Task descriptions validated with CMMI Steering Group

CMMI® Interactive!



Did you ever want a voice on what works, and what doesn't, with the implementation of CMMI in industry?

Objective:

 Collect and provide real-time, interactive feedback on how well your organization's implementation of CMMI supports the business objectives within your organization

Approach:

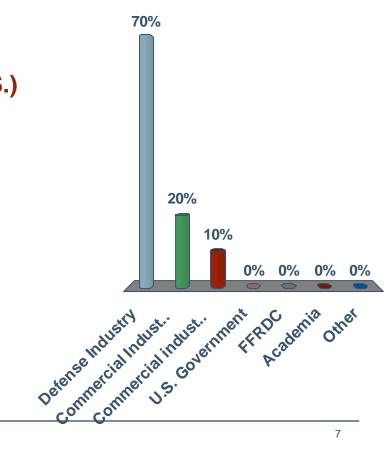
- Live anonymous electronic voting and results analysis
- Results will be provided to CMMI Steering Group and SEI to help establish future directions for the CMMI Product Suite
- No areas are off limits!
 - Model, appraisals, training, business impact,
- Open discussion for additional feedback (as time permits)

Appreciation to Harris Corporation for use of interactive voting devices.

What type of organization are you representing?



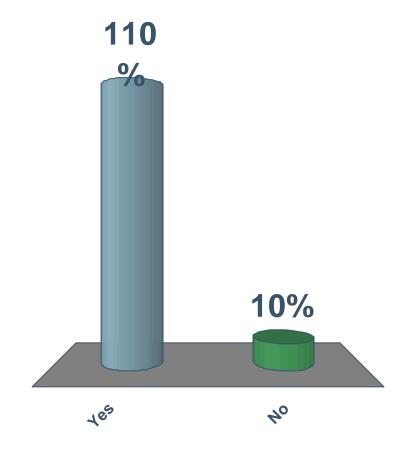
- 1. Defense Industry
- 2. Commercial Industry (U.S.)
- 3. Commercial industry (Non-U.S.)
- 4. U.S. Government
- 5. FFRDC
- 6. Academia
- 7. Other



Are you representing an organization that actually develops products?



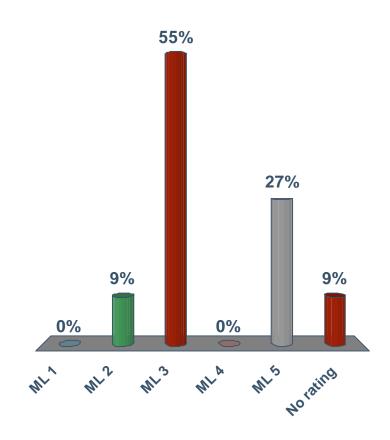
- 1. Yes
- 2. No



Does your organization have a CMMI maturity level rating?



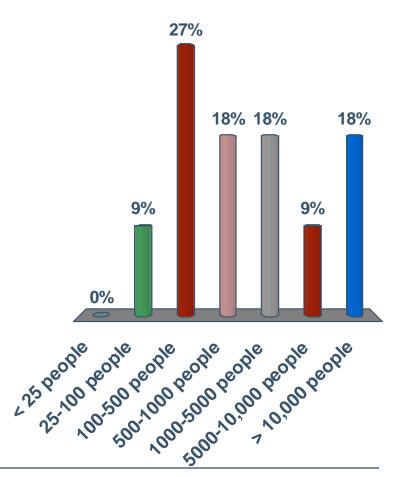
- 1. ML 1
- 2. ML 2
- 3. ML 3
- 4. ML 4
- 5. ML 5
- 6. No rating



How large is your organization (staff size)? (for the organizational unit with the CMMI maturity level rating indicated previously)



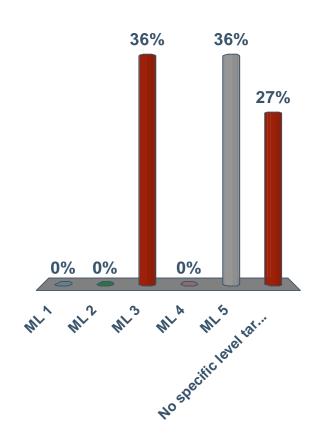
- 1. < 25 people
- 2. 25-100 people
- 3. 100-500 people
- 4. 500-1000 people
- 5. 1000-5000 people
- 6. 5000-10,000 people
- 7. > 10,000 people



Does your organization have defined goals for achieving a CMMI maturity level rating?



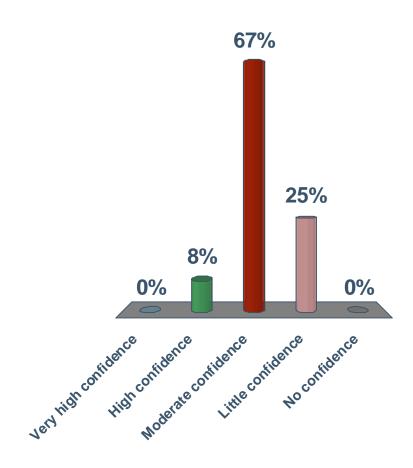
- 1. ML 1
- 2. ML 2
- 3. ML 3
- 4. ML 4
- 5. ML 5
- 6. No specific level targeted



How much confidence do you have in CMMI maturity level ratings as benchmarks?



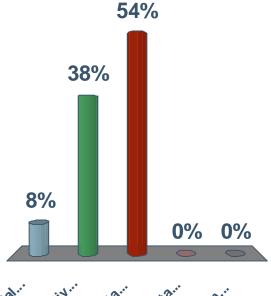
- 1. Very high confidence
- 2. High confidence
- 3. Moderate confidence
- 4. Little confidence
- 5. No confidence



How representative is your maturity level rating of how projects really execute in your organization?



- 1. Very representative (all projects)
- 2. Mostly representative (most projects)
- 3. Somewhat representative (some projects)
- 4. Marginally representative (few projects)
- 5. Not representative (no projects)

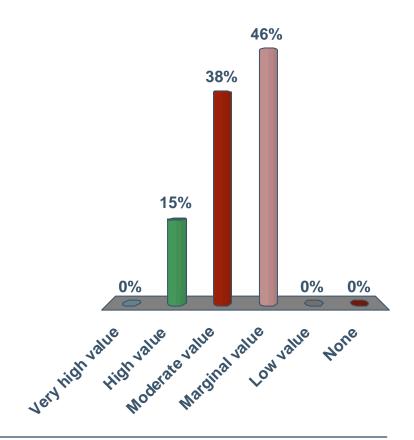




How much business value has your organization obtained through deployment of CMMI?



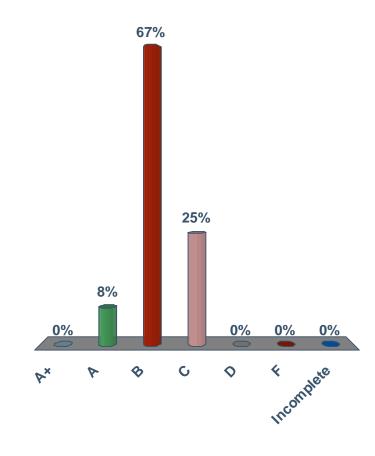
- 1. Very high value
- 2. High value
- 3. Moderate value
- 4. Marginal value
- 5. Low value
- 6. None



What grade would you give the CMMI Product Suite overall in meeting the needs of your business?



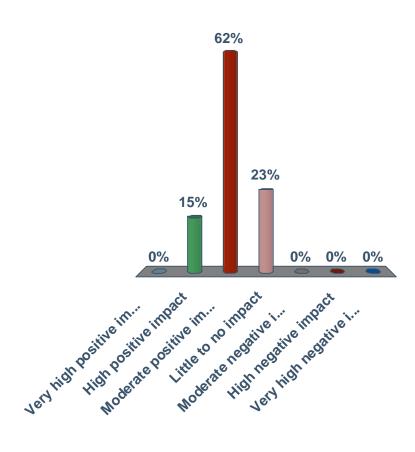
- 1. A+
- 2. A
- 3. B
- 4. C
- 5. D
- 6. F
- 7. Incomplete



What relationship has improvement in CMMI maturity levels had on performance of projects in your organization?



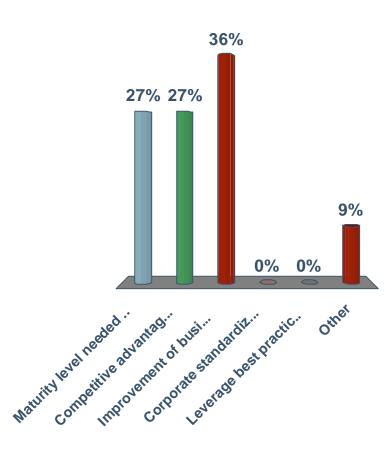
- 1. Very high positive impact
- 2. High positive impact
- 3. Moderate positive impact
- 4. Little to no impact
- 5. Moderate negative impact
- 6. High negative impact
- 7. Very high negative impact



What is the <u>primary</u> reason your organization uses CMMI?



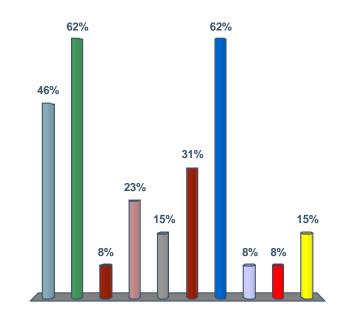
- 1. Maturity level needed to bid on contracts
- 2. Competitive advantage from maturity level ratings
- 3. Improvement of business processes
- 4. Corporate standardization initiative
- 5. Leverage best practices proven successful in industry
- 6. Other



What are the top benefits your organization has realized from implementation of the CMMI? (Pick up to 3 choices in priority order)



- **1.** <u>Performance</u> Consistently enhanced project performance
- 2. Marketing Better marketability/win rate
- Predictability Enhanced ability to accurately predict project performance
- 4. <u>Program Startup</u> Enhanced ability to "start up" a new project/program in a repeatable and predictable manner
- 5. <u>Responsiveness</u> Enhanced ability to react to customer risks with processes tailored to the customer's needs
- Cycle Time Decreased timelines for product development life cycles
- Customer Satisfaction More satisfied customers and more repeat business
- 8. Quantitative Management Enhanced ability to "tell our story" in a defined, quantitative manner
- Employee Morale satisfied employees, reduced turnover
- **10.** <u>Human Capital</u> More highly skilled and knowledgeable employees

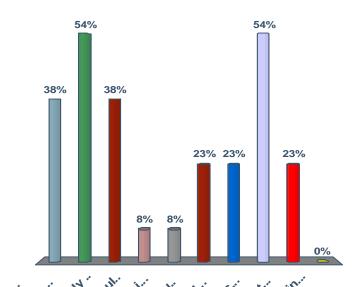


TO MOTHER PREDICTED TO PESSON SERVICE CUSTOMER SHIPTING TO CADITAL MORE HIGH.

What are the top issues related to the effectiveness of CMMI? (Pick up to 3 choices in priority order)



- 1. Gaming maturity levels undeserved
- 2. <u>Implementation Cost</u> Too costly to implement CMMI
- Appraisal Cost Too costly to do appraisals
- Inaccuracy Appraisal results are not accurate
- Not Useful CMMI content is not useful for my type of business
- Low Value The overall return does not justify the investment (low ROI)
- Complexity Model is too large (too many process areas and practices)
- 8. Wrong Emphasis Too much emphasis on compliance, not enough on improvement
- **9.** Consistency Inconsistent model interpretations
- **10.** No issues CMMI works fine in my organization

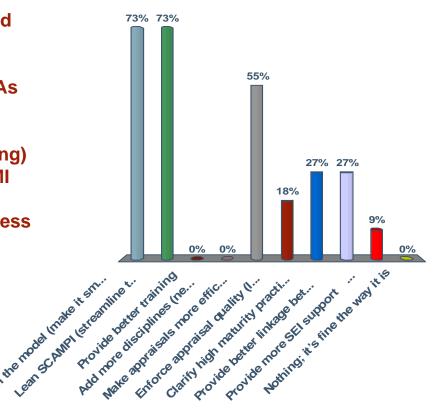




What should be the top priorities for improving the CMMI Product Suite? (Pick up to 3 choices in priority order)



- 1. Lean the model (make it smaller)
- 2. Lean SCAMPI (streamline the method and evidence rules)
- 3. Provide better training
- 4. Add more disciplines (new model PAs or constellations)
- 5. Make appraisals more efficient
- 6. Enforce appraisal quality (less gaming)
- Clarify high maturity practices (CMMI ML4-ML5 PAs)
- 8. Provide better linkage between process capability and project performance
- 9. Provide more SEI support (e.g., resources, examples, assets)
- 10. Nothing; it's fine the way it is



CMMI – Open Discussion/Feedback



What Works?	What Doesn't?
•Anonymous input via voting devices – avoid politically sensitive •Level 3 is a given – no sure about Levels 4-5	•Level mania – any measurement can be gamed •Abstractions can be stretched to the level of irrelevancy – too much breadth and coverage, trying to be everything to everyone •Appraisal costs (and preparation), and repeating every 3 years, impacts resources for process improvement •Extraordinary costs for adoption (for 3-day training, etc.) – especially brutal for international organizations •CMMI requires a huge cottage industry that can be self-perpetuating – is it worth it? •SCAMPI-A is a big production, outside the mainstream of the business operation •Need more formal recognition of multimodel improvement •Is CMMI high maturity anything other
NDIA CMMI Technology Conference November 2008	than software?

Thank you for your participation!



Watch for more communications feedback.

Want to learn more or get involved?

Contact your CMMI Working Group representative, or:

Geoff Draper
Harris Corporation
gdraper@harris.com

Please return the interactive voting devices!