



## **CMMI<sup>®</sup> and Stakeholder Involvement**

Worth the effort?



**Date: November 14, 2005**

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# Agenda

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- CMMI Stakeholder Content – What it is
- CMMI Stakeholder Sources – Where it came from
- Process Stakeholder Approaches – What folks do
- Issues – What's the problem
- Conclusions – So what now

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# CMMI Stakeholder Content

# CMMI Terms

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- **Stakeholder**
  - A group or individual that is affected by or in some way accountable for the outcome of an undertaking
- **Relevant stakeholder**
  - A stakeholder that is identified for involvement in specified activities and is included in an appropriate plan



# CMMI Comprehensive Stakeholder Tasks

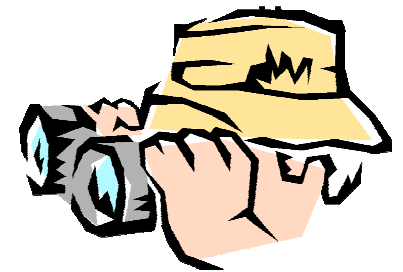
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## GP 2.7 Identify and Involve Relevant Stakeholders

- *Identify and involve the relevant stakeholders as planned.*

## PP SP 2.6 Plan Stakeholder Involvement

- *Plan the involvement of identified stakeholders.*



## PMC SP 1.5 Monitor Stakeholder Involvement

- *Monitor stakeholder involvement against the project plan.*

## IPM SP 2.1 Manage Stakeholder Involvement

- *Manage the involvement of the relevant stakeholders in the project.*

# **CMMI Stakeholder Involvements in SPs**

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**Explicit in Almost all PAs, particularly:**

- **Obtain plan commitment**
- **Identify, negotiate, and track critical dependencies**
- **Resolve issues**
- **Develop requirements**
- **Measure and analyze**
- **Establish teams**

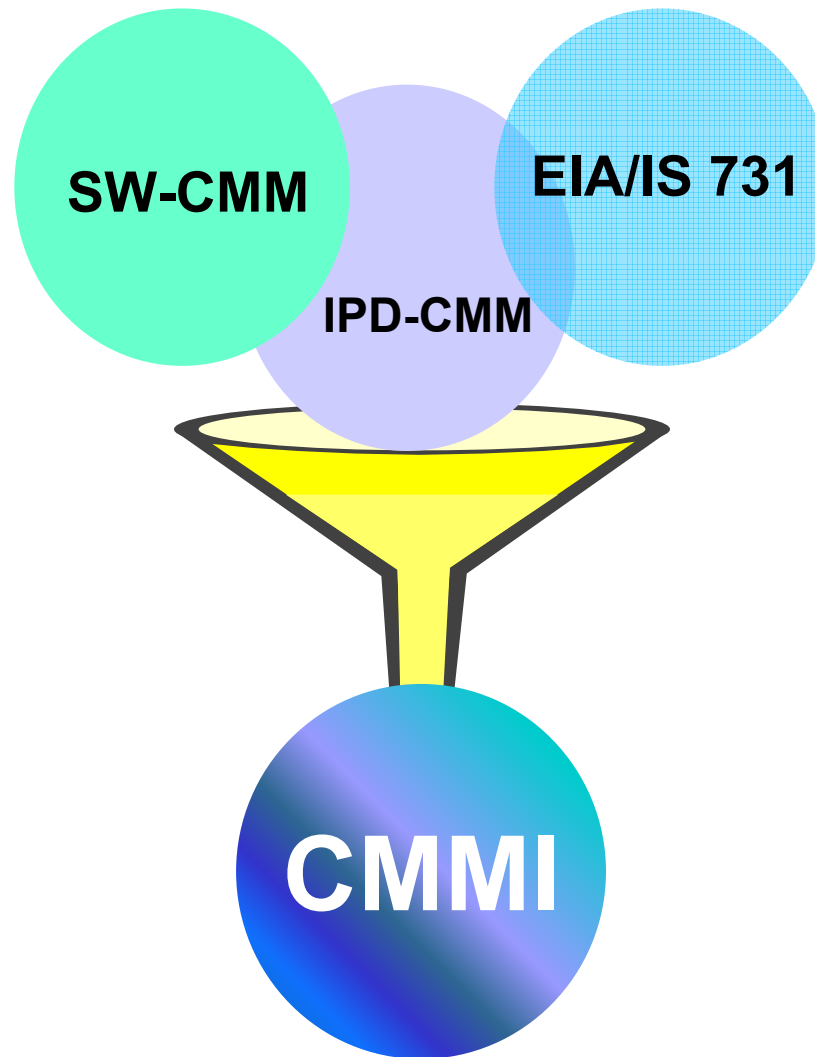
**Implicit – GP 2.7**

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# CMMI Stakeholder Sources

# CMMI Source Models for Stakeholders

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# SW-CMM

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- Review by, participation of...
  - Other affected groups
  - Other engineering groups
  - Software related groups
  - Management
  - Customer
- Identification of...
  - Statement of work covers
  - ... customer and end user
- Monitoring ??



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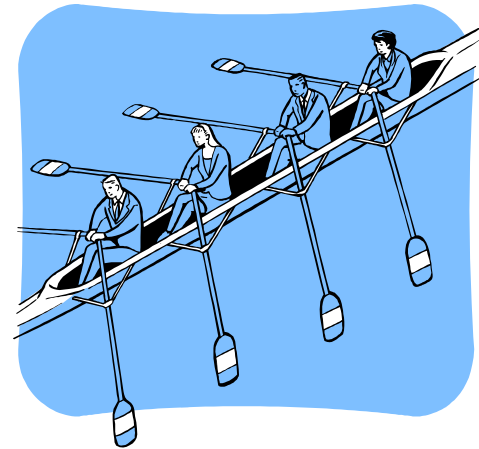
- Stakeholders include
  - Customer/users, developers, producers, testers, suppliers, marketers, maintainers, disposers
  - Others who may be affected by, or may affect, the system or product
- Stakeholders are:
  - Involved in requirements
    - engaging all stakeholders in an ongoing dialogue
  - Review plans
  - Coordinate disciplines
- Identify??
- Monitor??



# IPD-CMM

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- A stakeholder is defined as one or a group who has/have a direct impact on or from the product or its production process
- References to
  - Identified
  - Communicate with
  - Collaborate with on vision
- Identify?? Note under leadership
- Monitor??
- Not released - no use and appraisal experience.



# Additional Notes

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## History of Integrated Product Development

- Stakeholder involvement has significant impact
  - Performance
  - Cost
  - Schedule
- Good involvement not natural

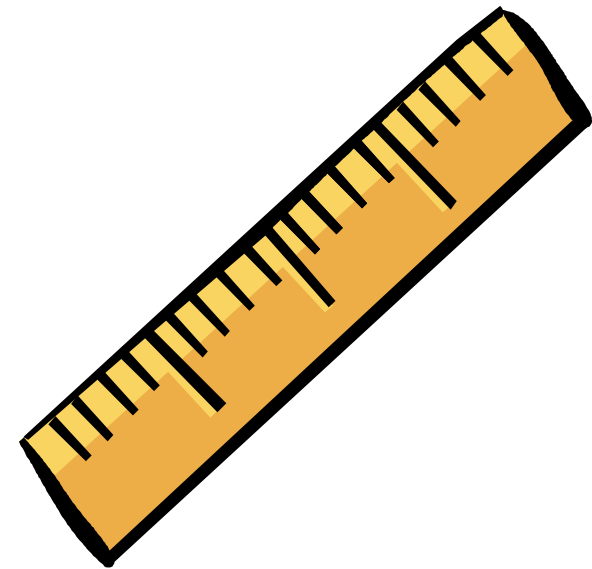
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# Process Stakeholder Approaches

# Range of Options

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- Assume it will work
- Let integrative tasks push involvement
- Emphasize identification
- Monitor participation
  - Quantity
  - Quality
- Address impact
  - Identify issues
  - Take actions to improve involvement



# Participation Planning in Processes

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## How handled

- Pre-defined
  - Roles and responsibilities
  - Defined participant lists
- Definition tasks
  - Stakeholder matrices
  - Lists in plans, agendas



## Results

- Strong on who is a stakeholder
- Weak on involvement specifics

# Monitor and Manage in Processes

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- Attendance taken, but not much participation tracked
- Meeting canceled if missing or not prepared
- Not much in the way of raising as an issue or taking corrective action
- Could be included as a measurement

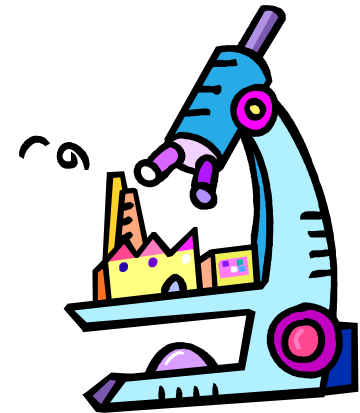




# Observations

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- General response – “We did this anyway”
- Some – “Made us think about it”
- Many changes due more to basic activity task than stakeholder practice
  - Requirements review now used
  - Integrated plan review brings stakeholders together
- Much on identification, little on managing



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# The Issues

# Issues

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Increased emphasis on monitoring?

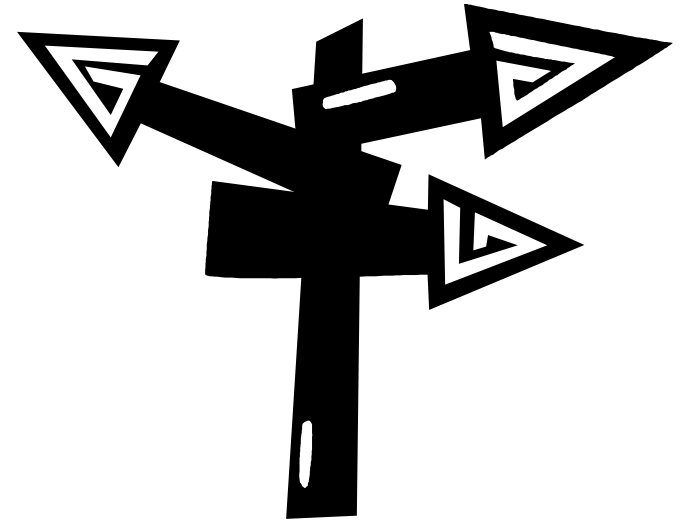
- Can a program manager answer:
  - How is stakeholder involvement working on your program?
    - Happening?
    - Impact?
  - What is the basis of your conclusion?
- What is the best balance between
  - The value of getting a better answer
  - The effort needed to get the answer



# CMMI Model Options

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- Eliminate, merge or reduce requirements
  - Delete GP and let PP, PMC and IPM suffice
  - Reduce monitoring language
- Leave requirements alone
  - Maintain current status
  - Change the way appraisals look at GPs
- Add requirements
  - Be more specific on assurance that planned involvement is as anticipated



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# Conclusions

# Conclusions - Usage

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- Quite a range of options are available
- Minimum option is inviting
- Greatest weakness is on managing involvement
- IPD history shows impact of stakeholder involvement
- You must decide!

# Conclusions - Model

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- Need to consider:
  - Is everybody really tuned in to real stakeholder involvement?
  - Can appraisal issues be resolved?
  - Does the Generic Practice add significant value?
- Better data would help decision on content

