

Joint Chapter Meeting  
INCOSE Chesapeake & PMI Baltimore  
Panel Discussion

Systems Engineering & Program  
Management  
Roles?

Is there a conflict?  
Can one person do both?

November 16, 2011  
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# What is SE & PM ?

## Systems Engineering (INCOSE SE Handbook v3.2)

Interdisciplinary approach and means to enable the realization of successful systems

Focuses on

- Defining customer needs
- Required functionality
- Identifying technical requirements
- Design synthesis and system validation
- Consider complete problem including both business and technical needs of all customers
- Goal of providing a quality product that meets the user needs

## Project Management (PMI PMBOK 4<sup>th</sup> ed.)

Application of knowledge, skills, tools, and techniques to project activities to meet project requirements

Balancing the competing project constraints including

- Scope
- Quality
- Schedule
- Budget
- Resources
- Risk



# Roles of SE & PM



# SE & PM

- Is there a conflict?
  - Can be but...
  - Constructive debate is good
  - To avoid conflict, need
    - To be on same team
    - Constant, open, constructive communication
    - Common understanding of & commitment to key
      - Project objectives
      - Project priorities and drivers
      - Technical objectives and approach
    - Common definition of project success



# PM & SE

- Can one person do both roles?
  - Sometimes, if...
  - Right skills, experience, domain knowledge, and desire
  - Smaller project
  - Less complex system and project

