Program Support:
Capabilities and Oversight Role

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Deputy Director, Assessments and Support

Systems and Software Engineering Directorate
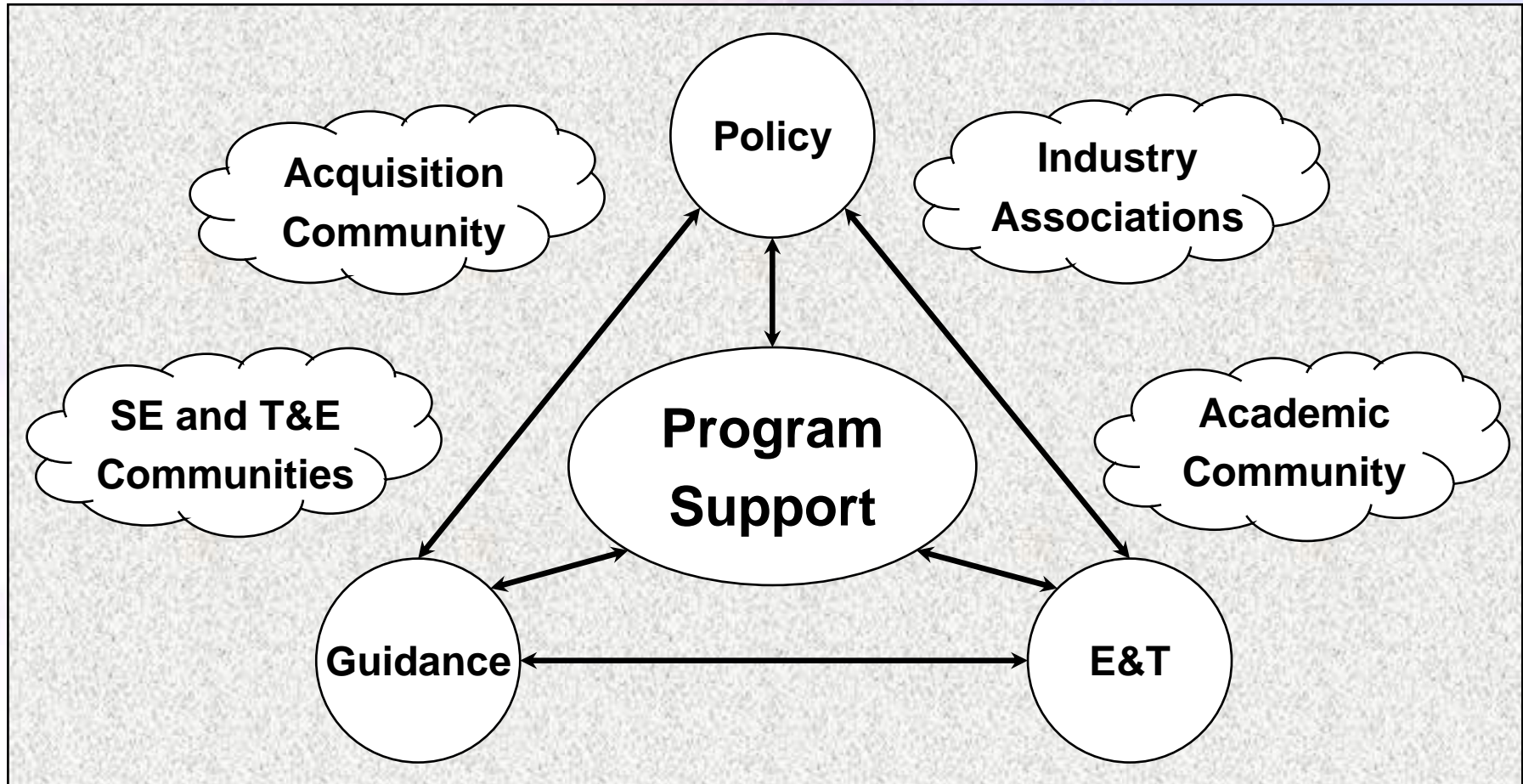Office of the Deputy Under Secretary of Defense for
Acquisition and Technology

June 16, 2006

Purpose

- Brief the DBSAE on Assessments and Support's capabilities

- Establish a dialogue to define SSE/AS's role vis-à-vis DBSAE/BTA programs on OSD oversight

Systems Engineering Revitalization Framework

Policy

Acquisition Community

Industry Associations

SE and T&E Communities

Program Support

Academic Community

Guidance

E&T

Driving Technical Excellence into Programs

Driving Technical Rigor Back into Programs "Portfolio Challenge"

- Systems and Software Engineering was tasked to:
  - Review program's SE Plan (SEP) and T&E Master Plan (TEMP)
  - Conduct program support reviews

- Portfolio of major acquisition (ACAT ID and IAM) programs, supporting 10 Domain Areas:

– Business Systems	– Rotary Wing Aircraft
– Communication Systems	– Land Systems
– C2ISR Systems	– Ships
– Fixed Wing Aircraft	– Munitions
– Unmanned Systems	– Missiles

Systems Engineering and T&E Support to Over 150 Major Programs in 10 Domain Areas

Driving Technical Excellence into Programs

| Topic	Systems Engineering	Test & Evaluation	Risk Management	Exit Criteria	Acquisition Strategy
Focus Areas	Requirements	V&V Traceability	Risk ID	Mission Systems	Mission Capability
	Organization & Staffing	Test Resources	Risk Analysis	Support	Resources & Management
	Technical Reviews	Test Articles	Risk Mitigation Planning	Manufacturing	Technical Process
	Technical Baseline	Evaluation	Risk Tracking	R & M	Technical Product
	Linkage w/ Other Program Mgmt & Controls	Linkage w/ Other Program Mgmt & Controls	Evidence of Effectiveness	Net Centric	Enterprise Environment
Product	SEP	TEMP	RM Plan	Phase Exit Criteria	ASR/APB

- Structured approach with multiple perspectives
- Iterative review process with Program Office; refining SE planning and documentation with each pass through

SEP Review Areas
- *Program Requirements*
- *Technical Staffing and Organization Planning*
- *Technical Baseline Management Planning*
- *Technical Review Planning*
- *Integration w/Overall Management of the Program*

5x5

SEP Prep Guide

DAG (Chapter 4)

Program Support Review Methodology

SME Insight
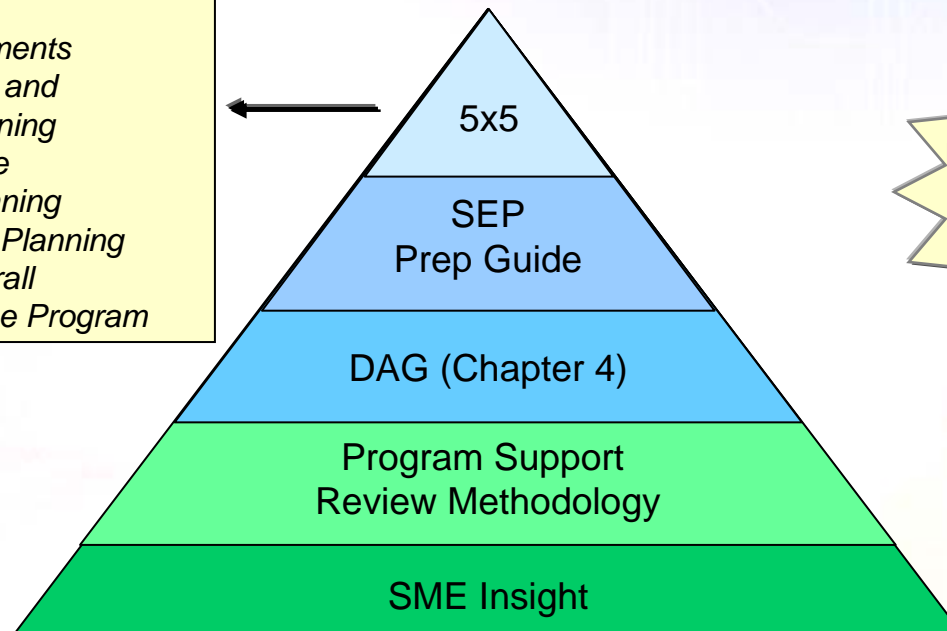
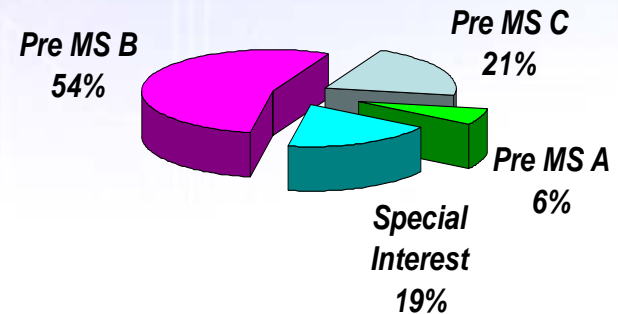**Programs showing evidence of better SE planning**

Thorough SE Planning Ensures Fewer "Gotchas" in Program Execution

Systems Engineering Plan Activity
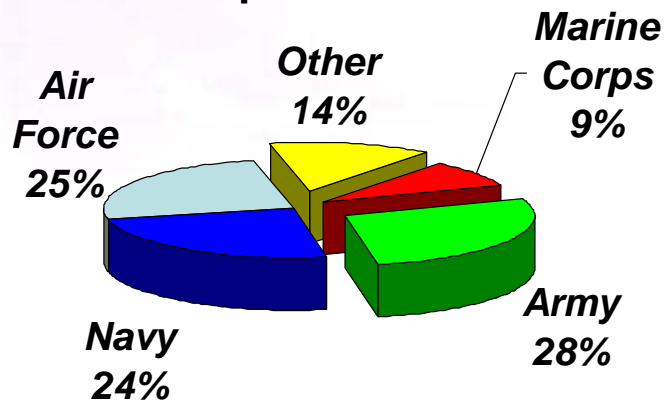## (since November 2004)

- Programs submitting SEPs: 49

- Number of SEPs reviewed: 88
  - Approved: 13
  - Pending final approval: 3
  - Pending draft review: 6

- Reviews planned for rest of FY06: >50

SEP Program Milestones

- Pre MS B 54%
- Pre MS C 21%
- Pre MS A 6%
- Special Interest 19%

Component-Managed Acquisitions

- Air Force 25%
- Other 14%
- Marine Corps 9%
- Navy 24%
- Army 28%

Programs by Product Line

- Rotary Wing - 7
- Comms - 4
- Business Systems - 8
- Land Systems - 4
- Fixed Wing - 6
- Sea Systems - 6
- Unmanned Systems - 2
- C2ISR - 12
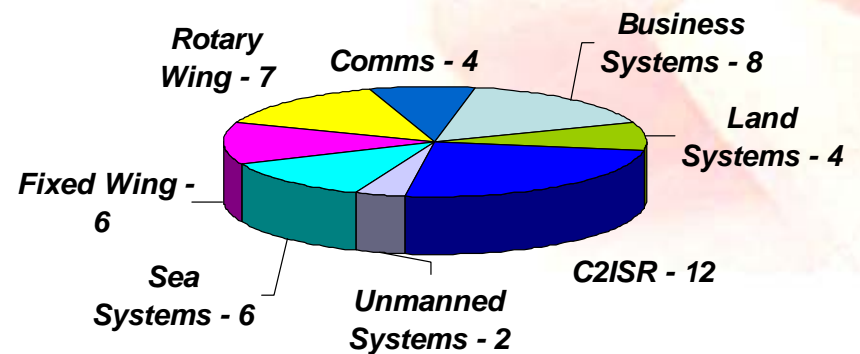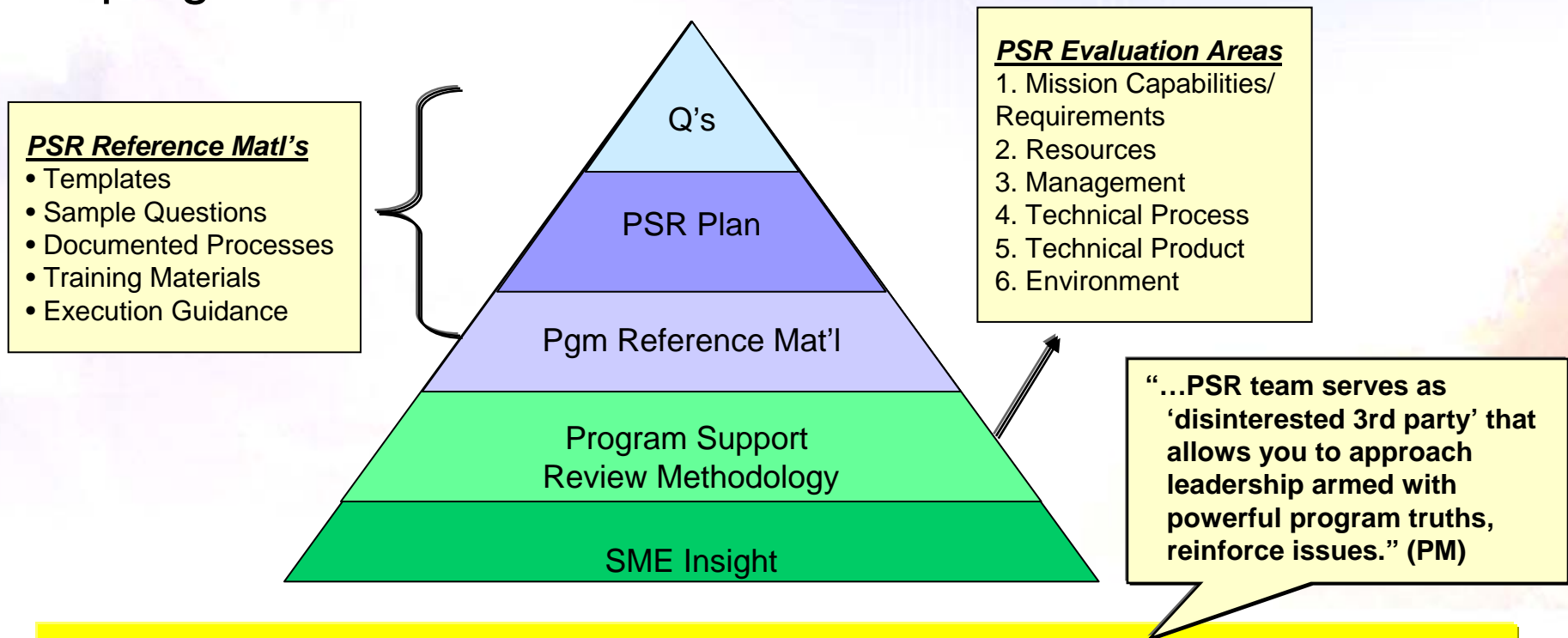
Program Support Review (PSR)

- Repeatable, tailorable, exportable process
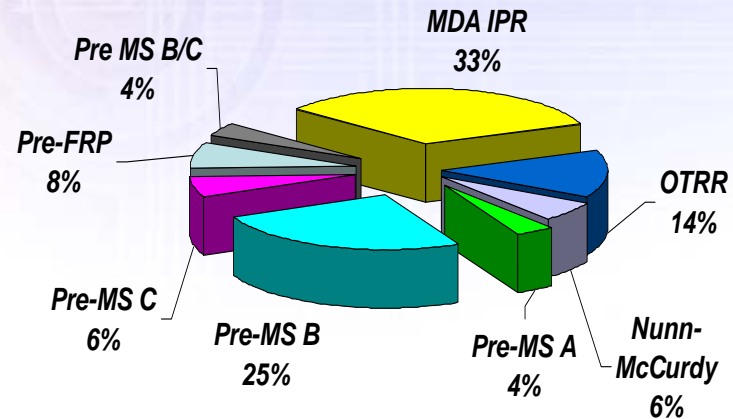- Trained workforce with in-depth understanding of PMs' program issues

PSR Reference Matl's
- Templates
- Sample Questions
- Documented Processes
- Training Materials
- Execution Guidance

Pyramid (top to bottom):
- Q's
- PSR Plan
- Pgm Reference Mat'l
- Program Support Review Methodology
- SME Insight

PSR Evaluation Areas
1. Mission Capabilities/ Requirements
2. Resources
3. Management
4. Technical Process
5. Technical Product
6. Environment

"…PSR team serves as 'disinterested 3rd party' that allows you to approach leadership armed with powerful program truths, reinforce issues." (PM)

PMs Report Process Is Insightful, Valuable, and Results Oriented

- PSRs/NARs completed: 34
- AOTRs completed: 7
- Nunn-McCurdy Certification: 3
- Participation on Service-led IRTs: 4
- Technical Reviews: 3
- Reviews planned for rest of FY06
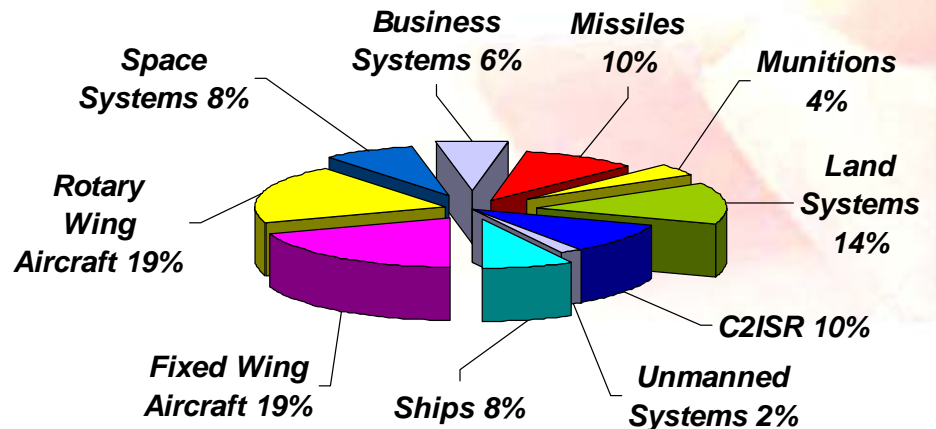 - PSRs/NARs: 10
  - AOTRs: 4
  - NARs: 2

Decision Support Reviews

- MDA IPR 33%
- Pre MS B/C 4%
- Pre-FRP 8%
- Pre-MS C 6%
- Pre-MS B 25%
- Pre-MS A 4%
- OTRR 14%
- Nunn-McCurdy 6%

Service-Managed Acquisitions

- Air Force 43%
- Agencies 6%
- Army 25%
- Navy 14%
- Marine Corps 12%

Programs by Domain Area

- Business Systems 6%
- Missiles 10%
- Space Systems 8%
- Munitions 4%
- Rotary Wing Aircraft 19%
- Land Systems 14%
- Fixed Wing Aircraft 19%
- C2ISR 10%
- Ships 8%
- Unmanned Systems 2%
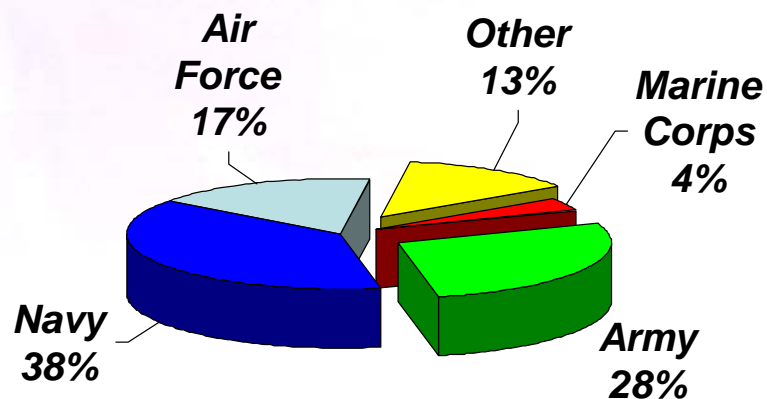
Castellano, June 16, 2006
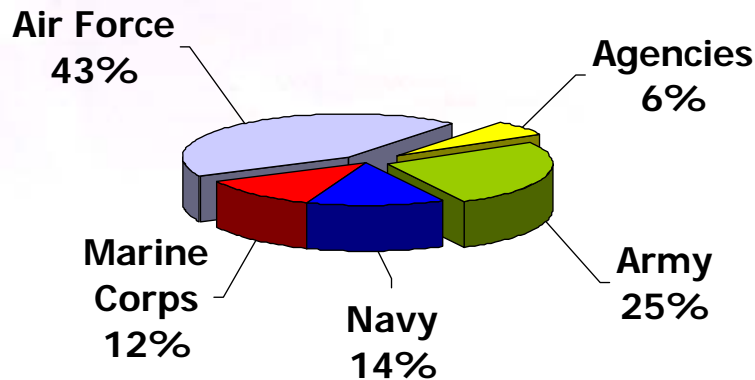
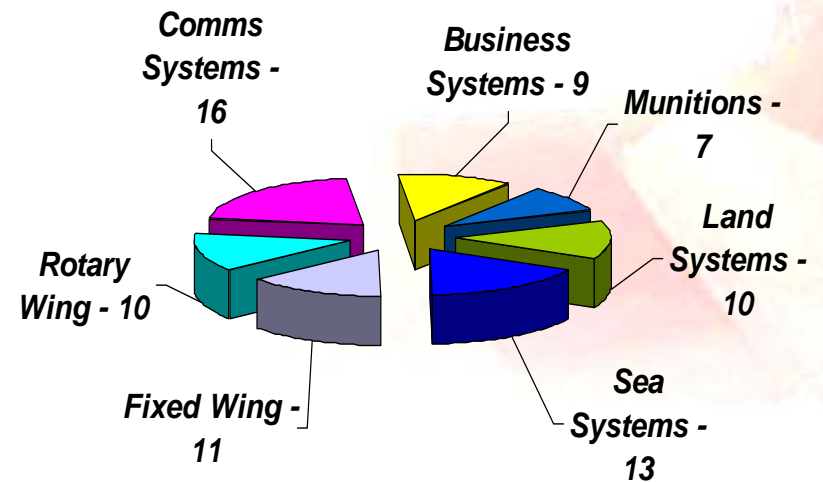# Test and Evaluation Master Plan Activity
(since November 2004)

- Programs submitting TEMPs: 66
- Number of TEMPs reviewed: 76
(includes TEMP updates/change pages)
  - Approved: 69
  - Pending approval: 7
- Reviews planned for rest of FY06: >30

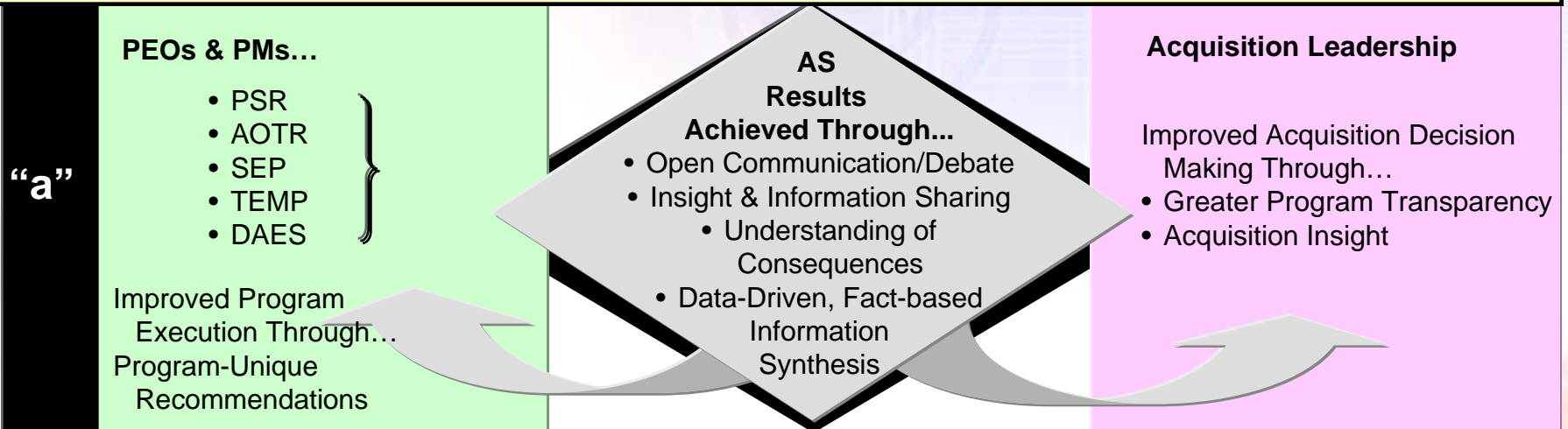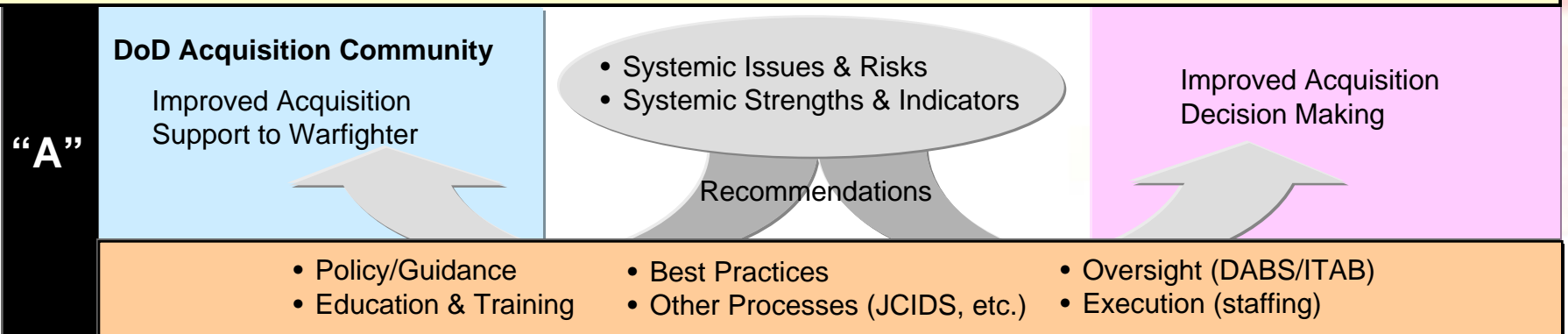## Component-Managed Acquisitions

Air Force 17%
Other 13%
Marine Corps 4%
Navy 38%
Army 28%

Programs by Product Line

Comms Systems - 16
Business Systems - 9
Munitions - 7
Land Systems - 10
Sea Systems - 13
Fixed Wing - 11
Rotary Wing - 10

Providing Value-Added Oversight

• Tactical, Program, and Portfolio Management

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PEOs & PMs…
- PSR
- AOTR
- SEP
- TEMP
- DAES

Improved Program Execution Through…

Program-Unique Recommendations

AS Results Achieved Through...
- Open Communication/Debate
- Insight & Information Sharing
- Understanding of Consequences
- Data-Driven, Fact-based Information Synthesis

Acquisition Leadership

Improved Acquisition Decision Making Through…
- Greater Program Transparency
- Acquisition Insight

• Strategic Management

"A"

DoD Acquisition Community

Improved Acquisition Support to Warfighter

- Systemic Issues & Risks
- Systemic Strengths & Indicators

Recommendations

Improved Acquisition Decision Making

- Policy/Guidance
- Education & Training
- Best Practices
- Other Processes (JCIDS, etc.)
- Oversight (DABS/ITAB)
- Execution (staffing)

Questions on Oversight Approach

- Questions on SSE/AS role regarding DBSAE/BTA programs on OSD MAIS and/or T&E oversight:
  - How should SEPs and TEMPs be staffed for OSD approval?
  - Most of these programs are on the CY06 OSD T&E Oversight List: Is the current list still valid, especially for the ERAM pilots?
  - In what format (paper, electronic, other, none provided) will SEP and TEMP information be provided?
  - Who will sign as the OIPT Lead for OSD-approved documents, e.g., TEMPs?
  - What assistance and/or oversight is SSE/AS expected to provide to these programs, especially for the ERAM pilots?
    - o SSE/AS needs working-level DBSAE/BTA points of contact in order to engage relevant programs in a dialog and assist them in their endeavors
    - o See potential to conduct ERAM reviews and/or offer DAPS as ERAM assessment tool

Way Ahead

- ## What is the next step?
  - – Need answers to oversight questions

Questions/Discussion

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