ASMC PDI: Workshop #57

Funding for Information Technology, Tech Refresh, etc.

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May 2019
Outline

• Expense vs Investment Costs (2)
• Product Improvement (1)
• Technology Refresh (AKA Tech Refresh) (1)
• Diminishing Manufacturing Sources and Material Shortages (DMSMS) (1)
• Information Technology (IT) and Automated Information Systems (AIS) (4)
Expense vs Investment Costs (1/2)

- Source: DoD 7000.14-R (FMR) Vol 2A, Chapter 1, Para 010201

- Basic distinction (the 2 expense-investment criteria):
  1. Intrinsic or innate qualities of the end item
     - Durability: Investment Cost
     - Consumability: Expense Cost

   AND

  2. Conditional circumstances under which the end item is used or the way it is managed
     - “Conditional circumstances…used” also referred to as “the nature of the effort” within the FM community
       - If conflict, conditional circumstances will prevail
Expense vs Investment Costs (2/2)

• Expense Costs: O&M, MILPERS, RDT&E
• Investment Costs: Proc, MilCon, RDT&E
• **Expense/Investment threshold** of $250K
  – Applies to all equipment items NOT centrally managed that have a system unit cost equal to or greater than $250K
    • If less than $250K, then use O&M
    • If centrally managed, the threshold does not apply and must use Proc unless purchased from DWCF and not an item that is part of a full funding effort
MOD INCREASES PERFORMANCE?

NO

SYSTEM IN PRODUCTION?

NO

DT OR OT REQUIRED?

YES

FUND DEVELOPMENT AND TEST WITH . . .
(INCLUDING MOD KITS USED FOR TESTING)

YES

PROCUREMENT

NO

FUND MOD KITS FOR END ITEMS, INSTALLATION OF KITS WITH . . .

RDT & E

PROCUREMENT

O & M
Tech Refresh

- Source: FMR, Vol 2A, Ch1, para 010201D.3.c
- **O&M funded:** Continuous tech refresh is the intentional insertion of newer technology to improve reliability, improve maintainability, reduce cost, and/or add minor performance enhancement, typically in conjunction with depot or field level maintenance.
- Tech refresh that significantly changes the performance envelope of the end item is considered a mod and, therefore, an investment. This effort must follow the “Product Improvement” rules.
DMSMS

- No specific reference in FMR

- Follows the expense-investment criteria
  - Primarily driven by “the nature of the effort”

- Tends to follow Tech Refresh rules, which tends to follow Product Improvement rules

- Can be funded in various appropriations
IT and AIS (1/4)

- Source: FMR Vol 2A, Chapter 1, para 010212
- IT and AIS not embedded in weapons systems and/or major end item procurements are budgeted IAW the investment/expense criteria and the appropriation or fund’s purpose
- Correct appropriation dependent on ability and the underlying tasks that make up the IT effort
- An IT effort may require multiple appropriations based on each discrete task
• RDT&E Funded
  – Development, T&E requirements, including prototypes and processes
    • Thus, all developmental activities needed to bring the programs to its objective system
  – COTS systems that require engineering design, integration, test and evaluation to achieve the objective performance
  – The acquisition, operation, and maintenance of IT systems used exclusively to support RDT&E activities
• **Procurement Funded**
  – Acquiring and deploying a complete system with a cost of $250K or more is an investment
  – For mod efforts, only the cost of the upgrade is counted towards the investment threshold
  – Procurement of fully developed and tested mod kits
  – Equipment purchased after successful system testing and a favorable fielding decision
  – Proprietary software subject to expense-investment criteria
    • Unless financed on an “annual fee” basis, then an expense and can be funded with RDT&E or O&M
O&M Funded

- Expenses incurred in continuous operations and current services
- Modernization costs under $250K
- One-time projects such as developing planning documents and studies
- Software releases categorized as iterations on the basic release and not involving significant performance improvements or extensive testing
- Minor improvements in software functionality which are accomplished during routine maintenance
- Items purchased from a commercial source (e.g., COTS and NDI) use expense-investment criteria (Proc or O&M)
Any Questions?
Other Transaction Authorities (OTAs)

- Funding policy derived from FMR
  - Vol 2A, Chapter 1, Para 010213
    - Defines “Research” vs “Development”
    - Explains what should be funded with RDT&E funds
  - Vol 2B, Chapter 5, Para 050201, “RDT&E Budget Activities”
    - Research funded with BA 1, 2, and 3
    - Prototypes funded with
      - BA 3: prototypes for field experiments and/or tests in a simulated environment; proof of technology feasibility; pre-MS B
      - BA 4: …system specific efforts to help expedite technology transition from lab to operational use. pre-MS B (e.g., TMRR phase prototyping)
      - BA 5: “…programs have passed MS B approval and are conducting engineering and manufacturing tasks…prior to full rate production.”; Mature system dev, LFT&E and IOT&E of prod rep articles (i.e., Post MS B EMD effort)

- OTAs
  - Research: BA 1, 2 or 3
  - Prototyping: BA 3, 4, 5
General Purpose vs. Special Purpose
Automated Data Processing Equipment (ADPE)

- Special Purpose - specially designed to meet specific military operational requirements or set of computational requirements
- General Purpose - anything else (most AIS programs fall in this category)
Funding Rules for All ADPE

**Investment - Procurement**
- Hardware/Investment > $100K
- COTS purchases > $100K

**Expenses - O&M**
- Operations
- Routine maintenance (data updates, screen mods, etc.)
- Replacement of equipment under $100K unit cost after initial installation
- COTS leases (not leading to ownership)
Funding Software Development/Test/Integration

General Purpose ADPE

- Hardware funded with Procurement
  Executive Software w/o modification - Procurement
  Modification of executive software - O&M
  Applications software - O&M

- Hardware funded with RDT&E
  All software - RDT&E

Special Purpose ADPE

- All software - RDT&E
ADPE Product Improvement

General Purpose ADPE - O&M

Special Purpose ADPE

- Expands performance envelope
  - Minor effort/cost - O&M
    - Software performance must have been baselined to make judgement of “minor” status
    - Improvement must be able to be developed & fielded with normal maintenance releases
  - Otherwise - O&M

- Within performance envelope
  - System not fully fielded - Procurement
  - Otherwise - O&M