New Scalable Acquisition Framework in the Department of Commerce

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Agenda

- **The Department of Commerce (DOC) and It's Acquisitions**

- **Impetus for the Acquisition Framework**

- **The DOC Acquisition Framework Realized**

- **Accomplishments and Future Plans**

DOC Acquisition

- ## 12 Bureaus + Office of the Secretary
  - Office of the Secretary (OS)
  - Bureau of Economic Analysis (BEA)
  - Bureau of Industry and Security (BIS)
  - Economic Development Administration (EDA)
  - Economics and Statistics Administration (ESA)
  - International Trade Administration (ITA)
  - Minority Business Development Agency (MBDA)
  - National Oceanic and Atmospheric Administration (NOAA)
  - National Institute of Standards and Technology (NIST)
  - National Telecommunications and Information Administration (NTIA)
  - National Technical Information Service (NTIS)
  - US Census Bureau (Census)
  - US Patent and Trademark Office (USPTO)

- ## ~49,000 employees (FTE and contractors)

- ## FY2011 budget of $10 B with $2.4 B in procurements and $1.3 B in grants

Office of Acquisition Management

Vision: Big "A" Acquisition

Big "A" Acquisition

Resources

Requirements
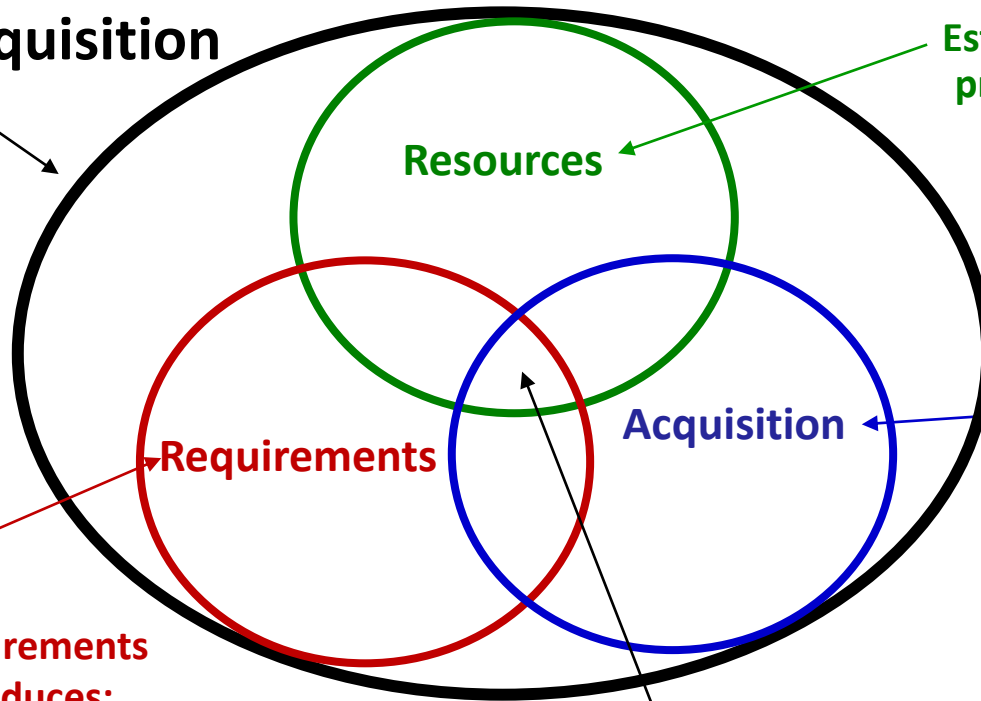
Acquisition

Establish a resource allocation process that produces:

- Realistic program cost and schedule estimates
- Balances requirements across Department

Establish an Acquisition process that produces:

- Required, affordable, timely products

Establish a requirements process that produces:

- Clearly defined, stable, validated, and affordable requirements

Processes are inter- and intra-departmentally coordinated and supported

Synchronize Requirements, Resources, and Acquisition to Deliver Capabilities

Genesis of Acquisition Improvement

- **Catalyst—challenges encountered in four high-profile acquisitions**
  - Small Water Plane Area Twin Hull (SWATH) - NOAA
  - Joint Polar Satellite System (Formerly NPOESS) - NOAA
  - Marine Operations Center – Pacific (MOC-P) - NOAA
  - Field Data Collection Automation (FDCA) - Census

- **DOC Secretary memo, June 18, 2010, mandated immediate and comprehensive review of the acquisition processes across the Department**

- **Review findings: Areas requiring improvements**
  - **Finding 1: Formal Requirements Management Process**
  - **Finding 2: Better Acquisition Planning**
  - **Finding 3: Departmental Oversight and Insight**
  - Finding 4: IT System
  - Finding 5: Performance Metrics
  - Finding 6: Standard Quality Assurance
  - Finding 7: Bulk Buying
  - Finding 8: Customer Service

Acquisition Framework

'Tipping Point' Issues Addressed in Acquisition Framework

	Conceptual Phase	Project Initiation Approval — MS 1	Project Definition Phase	Project Approval — MS 2	Project Development Phase	Project Implementation Approval — MS 3
Marine Operations Center – Pacific (MOC-P) - NOAA	• Need clear policy on definition of major project • Need to consider regulatory constraints • Need cross functional review • Need systematic validation of requirements		• Need comprehensive analysis of alternatives – address government and non-government solutions • Need to consider life cycle costs		• Need to clearly refine and articulate requirements	
Environmental Satellite SNPOESS/ GOES-R - NOAA	• Need to fully consider feasibility/ technical risk • Need process to develop requirements in a joint sponsorship environment		• Need technical risk assessment and mitigation process • Need good project planning and cost estimating		• Need technical risk assessment and mitigation process	
Small Water Plane Area Twin Hull (SWATH) - NOAA	• Need robust requirements development process		• Need good project management information			
Field Data Collection Automation (FDCA) - Census	• Need robust requirements development process				• Need good project planning and cost estimating • Need good budget estimates • Need comprehensive acquisition strategy	

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Other Project/Program Acquisition Lifecycles

OMB Exhibit 300 Planning Phase	OMB Exhibit 300 Acquisition Phase	OMB Exhibit 300 Operations & Maintenance

IT SDLC

Typical IT System Development Life-Cycle (SDLC) project phases

Initiation	System Concept Development	Planning	Requirements Analysis	Design	Development	Integration and Test	Implementation	Operations and Maintenance	Disposition

PMBOK

Project Management Institute - Project Management Body of Knowledge (PMBOK)

Initiating Process Group	Planning Process Group	Executing Processes & Monitoring & Controlling Process Groups	Closing Process Group	

NAO 216-108

NOAA NAO 216-108 - REQUIREMENTS MANAGEMENT

Needs Identification & Definition	Solution Alternatives Identification	Solution Selection	Acquisition & Implementation	Full Operational Capability	

NASA NPR 7120 Series

NASA NPR 7120.5D - Space Flight Program
NASA NPR 7120.7 - IT & Institutional Infrastructure
(IT Life-Cycle) (Institutional Infrastructure slightly different)

Approval for Implementation

Formulation			Implementation			
Pre-System Acquisition			System Acquisition		Operations	Decom-missioning
Pre-Phase A	Phase A	Phase B	Phase C	Phase D	Phase E	Phase F
Concept Studies	Concept & Technology Development	Preliminary Design & Technology Completion	Final Design & **Fabrication Build**	System Assembly, Integration & Test, **Launch**	Deployment, Operations & Sustainment	Decom-missioning **Closeout**

DoD 5000 Series

DoDI 5000.02 (12/8/2008) Operation of the Defense Acquisition system

Pre-System Acquisition		System Acquisition		Sustainment	
Milestones — A / B / C					
Material Solution Analysis	Technology Development	Engineering and Manufacturing Development	Production & Deployment	Operations & Support	
		Integrated System Design	System Capability & Manufacturing Process Demonstration	LRIP/IOT&E	Full-Rate Production & Deployment	Life Cycle Sustainment	Disposal

LRIP = Low-Rate Initial Production
IOT&E = Initial Operational Test and Evaluation

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Overview of Framework

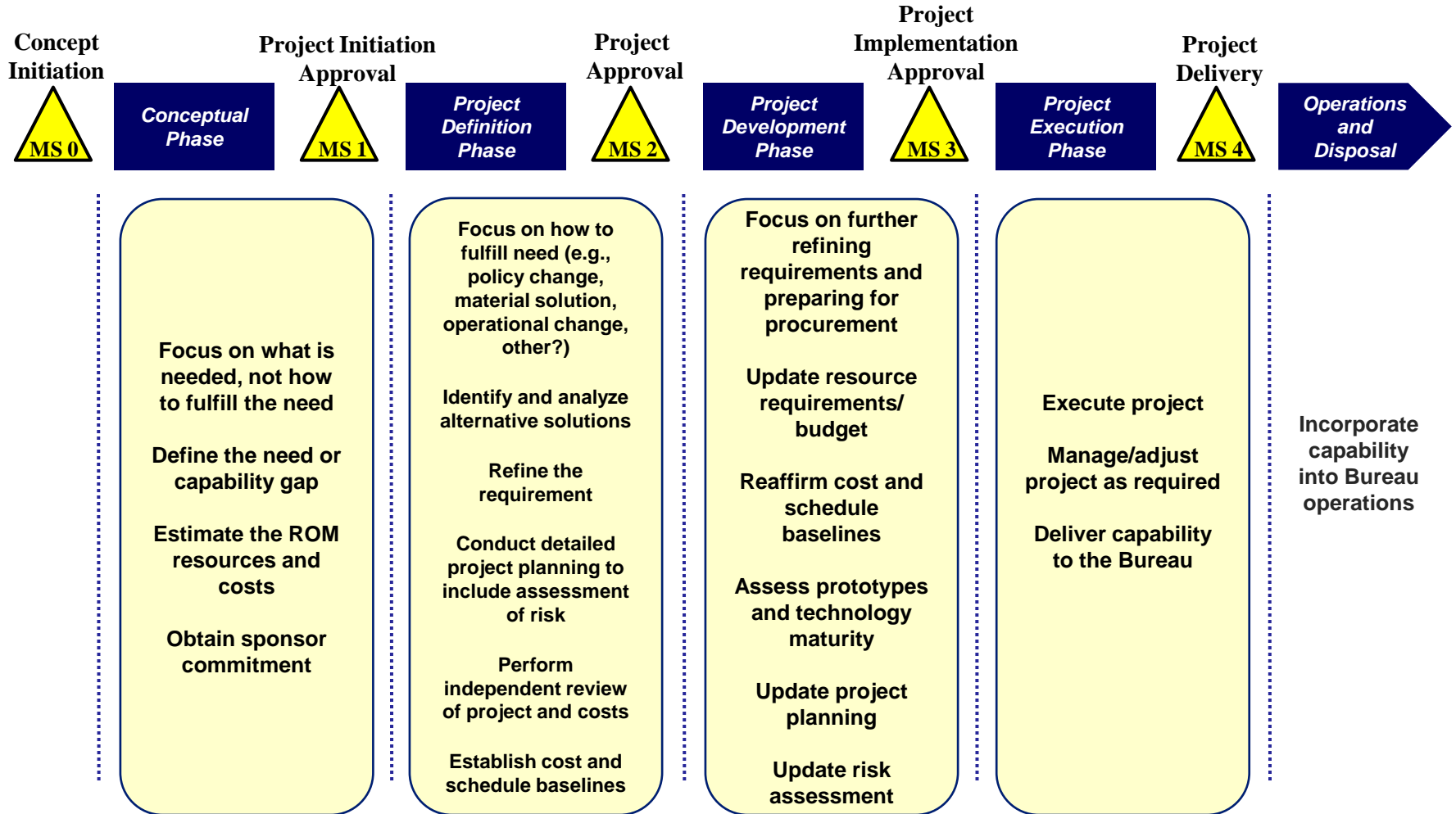**The DOC Scalable Acquisition Project Management Framework is:**

- A description of the minimum standard of processes and reviews for high profile projects

- A recommended lifecycle model for managing acquisition projects of all levels

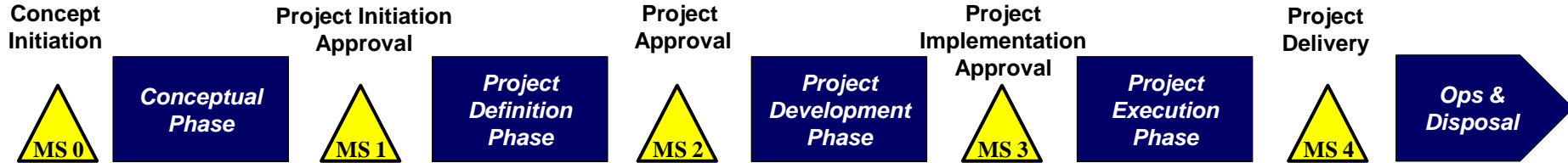AND which must overcome a systemic misconception:
Procurement ≠ Acquisition

DOC Scalable Acquisition Project Management Framework

Concept Initiation — MS 0

Conceptual Phase

Project Initiation Approval — MS 1

Project Definition Phase

Project Approval — MS 2

Project Development Phase

Project Implementation Approval — MS 3

Project Execution Phase

Project Delivery — MS 4

Operations and Disposal

Conceptual Phase

Focus on what is needed, not how to fulfill the need

Define the need or capability gap

Estimate the ROM resources and costs

Obtain sponsor commitment

Project Definition Phase

Focus on how to fulfill need (e.g., policy change, material solution, operational change, other?)

Identify and analyze alternative solutions

Refine the requirement

Conduct detailed project planning to include assessment of risk

Perform independent review of project and costs

Establish cost and schedule baselines

Project Development Phase

Focus on further refining requirements and preparing for procurement

Update resource requirements/ budget

Reaffirm cost and schedule baselines

Assess prototypes and technology maturity

Update project planning

Update risk assessment

Project Execution Phase

Execute project

Manage/adjust project as required

Deliver capability to the Bureau

Operations and Disposal

Incorporate capability into Bureau operations

DOC Acquisition Project Management Framework Documentation

Concept Initiation	Conceptual Phase	Project Initiation Approval	Project Definition Phase	Project Approval	Project Development Phase	Project Implementation Approval	Project Execution Phase	Project Delivery	Ops & Disposal
MS 0		MS 1		MS 2		MS 3		MS 4	

Processes to be conducted during phases:

• Needs Analysis • Resource/Affordability Analysis • Independent Cost Review • Initial Risk Management	• ID/Analysis of Alternatives • Capabilities Requirements Development • Requirements Traceability • Resource Requirements • Project Cost Estimate • Independent Cost Estimate • Independent Review • Project Planning • Tech Readiness Assessment • Risk Management Update • Acquisition Strategy	• Requirements Traceability • Requirements Refinement • Budget Planning • Project Cost Estimate • Independent Cost Estimate • Project Planning Update • Independent Review • Product Demo/ Prototype • Risk Management Update • Acquisition Planning	• Requirements Traceability • Execution Management, Oversight, and Adjustment

Documentation required for milestone reviews:

• Mission Need Statement • Initial Risk Report • Independent Cost Estimate (ICE) Report • Sponsor Commitment	• Analysis of Alternatives Rpt • Concept of Operations • Capabilities Requirements Document • ICE Report • Project Mgt Plan • Project Baseline • Tech Readiness Report • Risk Report Update • Acquisition Strategy Report • Sponsor Commitment Reaffirmation	• ICE Report • Project Mgt Plan Update • Baseline Update • Product Demo/Prototype Report • Procurement Requirements Document • Risk Report Update • Acquisition Plan • Sponsor Commitment Reaffirmation	* Note: information from documents required at MS2 and MS3 are used to develop the Business Case

Office of Acquisition Management

Implementation Elements

- **Chartering an Oversight Body, the Milestone Review Board (MRB)**

- **Authoring DOC Acquisition Policy and a Guidebook**

- **Building the PM Cadre**
  - Certification
  - Training and Support
  - Community of Practice

- **Providing Direct Support to Programs/Projects**

Key Components of the MRB

- **Early Focus:** To ensure adequate review and oversight at key "milestones" throughout the life of the project/program.
- **Authority:** Chaired by the DOC Deputy Secretary as the Milestone Decision Authority
- **Integration:** It will replace existing departmental reviews, when projects are approaching a key milestone, by combining subordinate review co-chairs with other Board participants.

    (Existing departmental reviews include the Commerce IT Review Board (CITRB), Acquisition Review Boards (ARB),Real Property Reviews, or Deputy Secretary reviews.)

- **Standardization:** The MRB will use standard evaluation criteria to promote consistency and clarity.
- **Optimization:** A cross-functional team represented by budget, IT, contracts, costing, project management, and risk will work with the program/project staff prior to a milestone review to ensure a more productive MRB review.

Scope of the MRB:
High-Profile Programs and Projects

- **High Risk Factors**
  - Criticality
    - Key to mission goals and objectives and to achieving the objectives in the DOC Balanced Scorecard
  - Complexity
    - Multiple organizations' involvement and interfaces; complex and/or rare skills requirements; analogous characteristics to other challenged programs
  - Technology
    - Challenges identified requiring probable research, development, and/or demonstration
  - Visibility
    - Subject to external review and extraordinary media or political attention; potential to damage the reputation of the DOC if unsuccessful
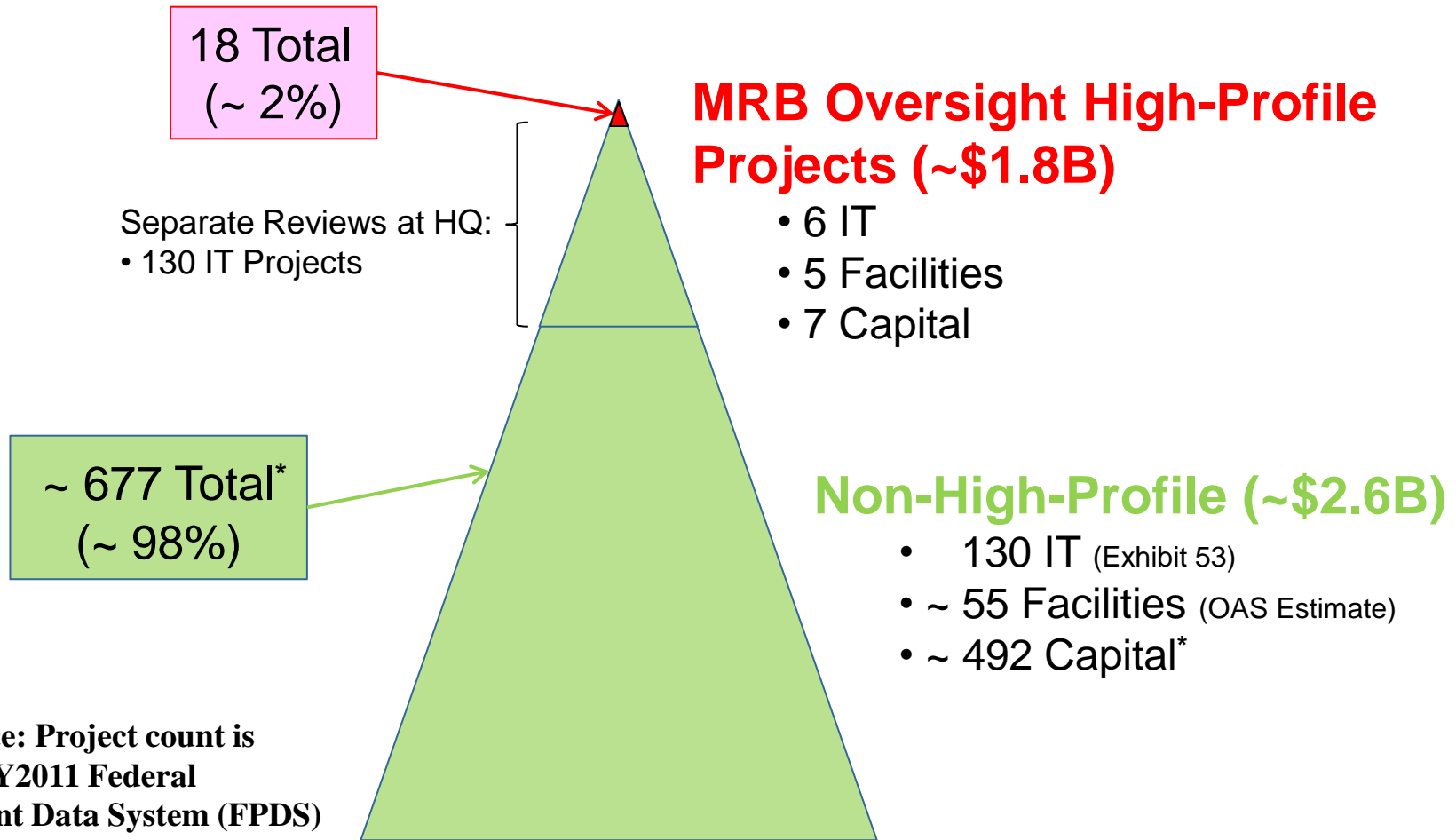
- **Dollar Thresholds**
  - IT: $75M lifecycle or $30M annual costs
  - Real Property/Facilities: $40M lifecycle costs
  - Other: Development costs greater than $75M, or $250M lifecycle costs

- **High-profile projects as designated by Department or Bureau leadership or MRB members**

High-Profile Projects in Perspective

18 Total
(~ 2%)

MRB Oversight High-Profile Projects (~$1.8B)
- 6 IT
- 5 Facilities
- 7 Capital

Separate Reviews at HQ:
- 130 IT Projects

~ 677 Total*
(~ 98%)

Non-High-Profile (~$2.6B)
- 130 IT (Exhibit 53)
- ~ 55 Facilities (OAS Estimate)
- ~ 492 Capital*

* **Data Source: Project count is based on FY2011 Federal Procurement Data System (FPDS) for contracts > $500K.**

High-Profile Project List

High Profile Program/Project -- Pre Milestone 3 (Pre project implementation approval)

Program/Project	Org	Type	Pre/Active/C	MC	CITRB	MS 0	MS 1	MS 2	MS 3	MS 4	Upcoming
				CY 2012 Reviews		Program/Project Schedule					
Census 2020: Capital Projects	**Census**	**Capital**	**Active**				**2012**	**2015**			**MS 2**
General Purpose Lab Renovations (7 labs)	NIST	Facilities	Pre				TBD				Pre MS 1
Building 245	NIST	Facilities	Pre				TBD				Pre MS 1
Joint Polar Satellite Systems (JPSS)	**NOAA**	**Capital**	**Active**	x			Jul-12				**MS 1?**
GOES-R	**NOAA**	**Capital**	**Active**	x					May-12		**MS 3**
JASON-3	NOAA	Capital	Active						May-12		MS 3
DSCOVR	NOAA	Capital	Active						May-12		MS 3
NEXRAD System Product Improvemnet	NOAA	IT	Active					2015			MS 2
NWS Telecommunication Gateway System	NOAA	IT	Active		Nov -- Prog Rvw			TBD			MS 2
Next Generation Air Transportation System (NextGen)	NOAA	IT	Active					TBD			MS 2
Weather Radio Improvement Project (WRIP)	NOAA	IT	Active		Feb -- TechStat				Oct-12		MS 3
Fisheries Science Vessel 7 (FSV 7)	NOAA	Capital	Pre				2015				MS 1
Bigelow Home Port, MA	NOAA	Facilities	Pre				2014				Pre MS 1
NWS Logistics Center Relocation, Kansas City, MO	NOAA	Facilities	Pre				2013/14				MS 1
EDA 2.0	EDA	IT	Active			defacto	2013				MS 1
First Net	NTIA	Capital	Pre			Jul-12					MS 1
Herbert C. Hoover Building (HCHB) Renovation	**OS/GSA**	**Facilities**	**Active**	x							**MS 3**
Commerce Business Application Solutions (BAS)	**OS/CFO**	**IT**	**Active**								**MS 1?**

High Profile Program/Project -- Post MS 3

Program/Project	Org	Type	Pre/Active/C	CY 2							
Precision Measurement Lab (B1E)	NIST	Facilities	Active								
PTO Patents End to End (PE2E)	PTO	IT	Active								
Trademark Next Generation (TM NG)	PTO	IT	Active								
Fee Processing Next Generation (FPNG)	PTO	IT	Active								
NEI: Export.gov (Capital Components)	ITA	Capital	Active	x							MS 4
Broadband Technology Opportunities Program (BTOP) Grant Execution	NTIA	Capital	Active	x							MS 4
Federal Spectrum Management System (FSMS)	NTIA	IT	Active		Feb -- Prog Rvw						MS 4
Enterprise Cyber Security Monitoring and Operations (ECMO)	OS/OCIO	IT	Active	x	Jan -- Prog Rvw				Oct-11	Sep-13	MS 4
Human Resource Management System (HRMS)	OS/OHRM	IT	Active						Oct-10	Sep-14	MS 4
Weather and Climatic Operational Supercomuter Systems	NOAA	IT	Active		Jul -- Prog Rvw						MS 4
R&D High Performance Computing System	NOAA	IT	Active		Dec -- Prog Rvw						MS 4
High Performance Computer Center, Fairmont, WV	NOAA	Facilities	Active								MS 4
Fisheries Science Vessel 6 (FSV 6)	NOAA	Capital	Active				Apr-10	Oct-10	Jan-13		MS 4
Southwest Fisheries Science Center. Lajolla, CA	NOAA	Facilities	Active						Aug-12		MS 4
National Weather Service Water Center, Tuscaloosa, AL	NOAA	Facilities	Active								MS 4
Pacific Regional Center, Pearl Harbor, HI	NOAA	Facilities	Active								MS 4

- Excludes Level-of-Effort programs
- Only 18 programs/projects targeted for MRB milestone authority
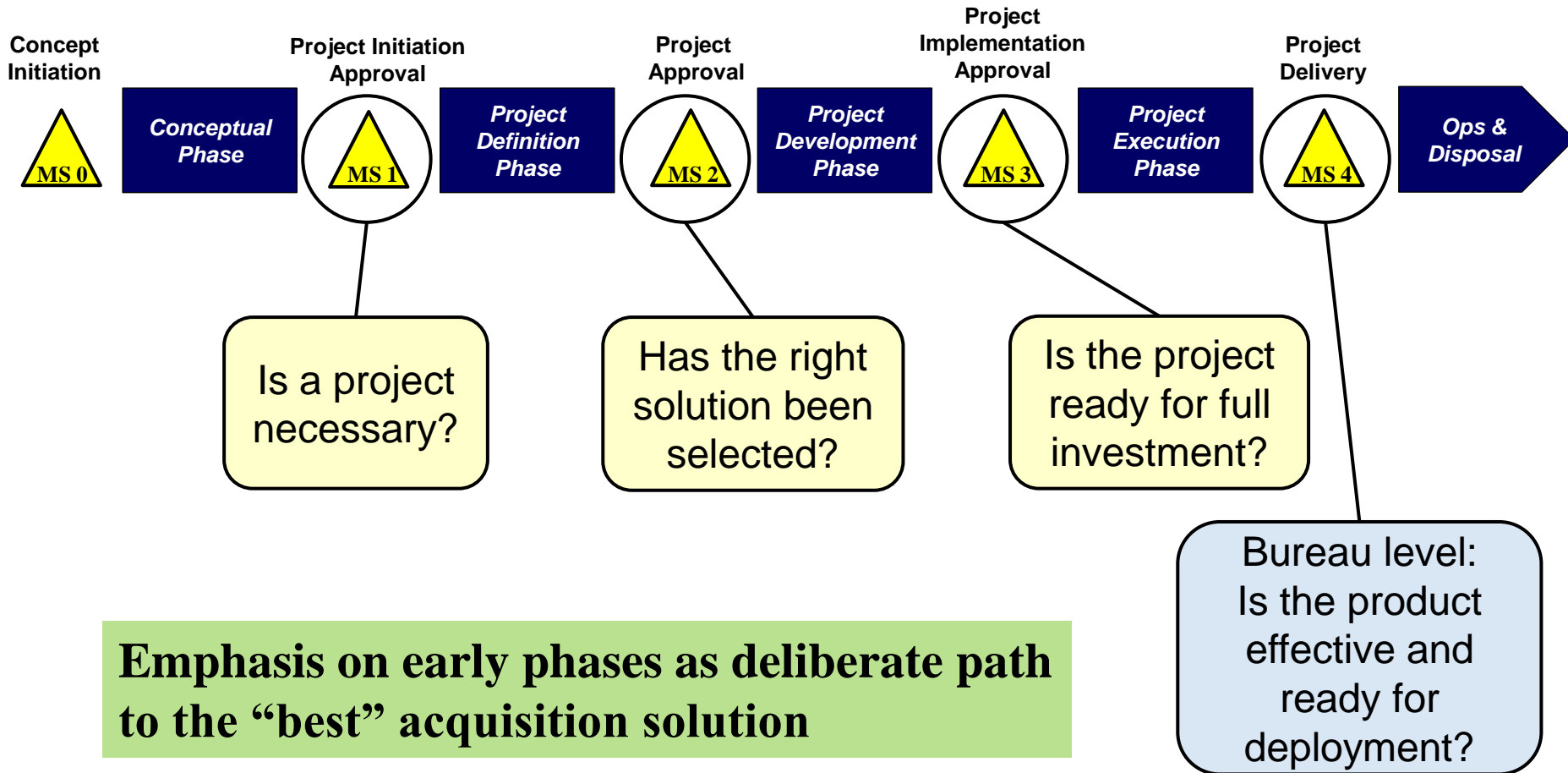- Bureau management after Milestone 3

Critical Oversight Questions

- **Is there a real mission need (tied to strategic goals and objectives)?**

- **What are the alternative solutions? Do you really need a procurement to satisfy the need?**

- **What are the project requirements? Have all the stakeholders been identified and participated in determining requirements?**

Key Milestone Questions

Concept Initiation — **MS 0** → *Conceptual Phase* → Project Initiation Approval — **MS 1** → *Project Definition Phase* → Project Approval — **MS 2** → *Project Development Phase* → Project Implementation Approval — **MS 3** → *Project Execution Phase* → Project Delivery — **MS 4** → *Ops & Disposal*

MS 1: Is a project necessary?

MS 2: Has the right solution been selected?

MS 3: Is the project ready for full investment?

MS 4: Bureau level: Is the product effective and ready for deployment?

Emphasis on early phases as deliberate path to the "best" acquisition solution

MRB Purpose

- **Through its Chair, the Deputy Secretary, authorizes identified high-priority programs/projects to proceed from one Framework phase to the next**

- **Ensures that high-profile investments:**

  - Contribute to the Secretary's strategic vision and mission requirements

  - Employ sound, validated investment methodologies

  - Provide the highest ROI with known, acceptable risk

MRB Membership

Chair (and Milestone Decision Authority)

DOC Deputy Secretary

Department of Commerce Staff

- **Chief Financial Officer / Assistant Secretary for Administration**
- **Chief Information Officer**
- **Director, Office of Acquisition Management**
- **Director, Office of Administrative Services**
- **Deputy Assistant Secretary for Resource Management**
- **Deputy Chief Financial Officer**
- **Director, Office of Budget**
- **Director, Office of Program Evaluation and Risk Management**
- **Office of General Counsel (as designated)**

Bureaus

- **National Oceanographic and Atmospheric Administration**
- **US Census Bureau**
- **Nat'l Institute of Standards and Technology**
- **US Patent and Trademark Office**
- **Small Bureau (rotational)**

Project Under Review

- **Operating Unit Under Secretary or designee**
- **Bureau Procurement Official**
- **Bureau Chief Financial Officer**
- **Program or Project Manager (briefer)**

Major Issues Overcome in Policy Coordination

- **Policy Application**
  - Milestone Review Board (MRB) Decision Authority and Responsibility
  - De-conflicting Multiple Reviews
  - High-Profile Dollar Thresholds and Applicability

- **Policy Execution**
  - Lifecycle and Development Baselines
 - Timelines for Review (Depth of Review)

The Result:
Key Draft Acquisition Policy Elements

- **Application of the Framework throughout DOC and the critical management decisions that it encompasses**

- **The Deputy Secretary, Chair of the MRB, as the milestone decision authority for programs identified for MRB oversight**

- **The ascendancy of the MRB over functional/subject-area-specific departmental reviews for milestone decisions**

- **The establishment of development and lifecycle cost baselines for all DOC high-profile programs and projects at Milestone 2 and refined at Milestone 3**

Office of Acquisition Management

New DOC Acquisition Framework Guidebook

- **Available on OMB MAX**

- **33 pages of text and procedures**

- **136 pages of document templates with extensive annotation**

**DOC Scalable Acquisition
Project Management Guidebook**

July 2, 2012
Version 1.0
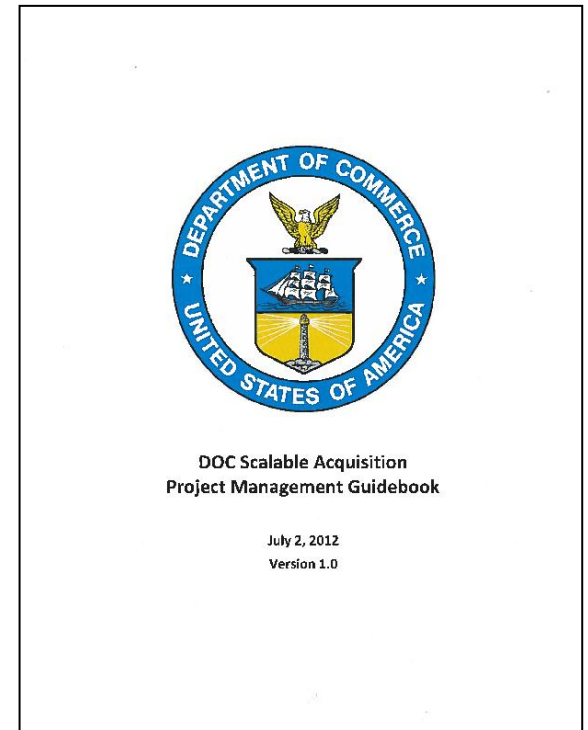
Guidebook Structure

- **By-phase process discussion**

- **Milestone documentation templates with narrative expectations descriptions**

  - Minimum content for MRB-oversight programs/projects
  - Scalable for non-MRB by the Bureau or the project's milestone decision authority

- **Links to Bureau policy and guidance documents and to generic and other government reference materials were applicable**

Development of the DOC PM Cadre

- **Promote internships, developmental assignments, and other opportunities for qualified PMs in DOC**

- **Develop and maintain an up-to-date and useful PM Community of Practice (CoP) on OMB MAX with periodic "did you know" bulletins to share lessons learned, new policy, etc.**

- **Offer more PM-focused specialized training opportunities, regularly scheduled group meetings, and workshops**

- **Establish certification requirements for non-IT PMs**

Accomplishments
(thru September 2012)

- Developed new DOC Acquisition Scalable Project Management Framework

- Held DOC-wide AIP-focused workshops and conferences

- Briefed Senior Leadership on Framework concepts
- Completed three Framework evaluation periods with over 450 comments received/adjudicated
- Completed Acquisition Framework Guidebook with details on the Framework, its phases, and its documentation (published in June 2012)
- Identified high-profile programs and projects
- Prepared final draft Interim Acquisition Framework Policy after Department-wide coordination
- Beta tested Framework and Cost Analysis training for adaption on the Commerce Learning Center's intranet site

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Next Steps: FY13 Implementation

- **Begin initial implementation of the Framework working with high-profile projects with anticipated FY13 and FY14 milestones**

- **Formally establish Milestone Review Board and its processes and support mechanisms**

- **Stand up organizational support to the Framework process and programs/projects along with a centralized information repository**

- **Establish a PM Community of Practice (CoP), expanded DOC certification, and finalized Framework training**

Acquisition Framework Explained
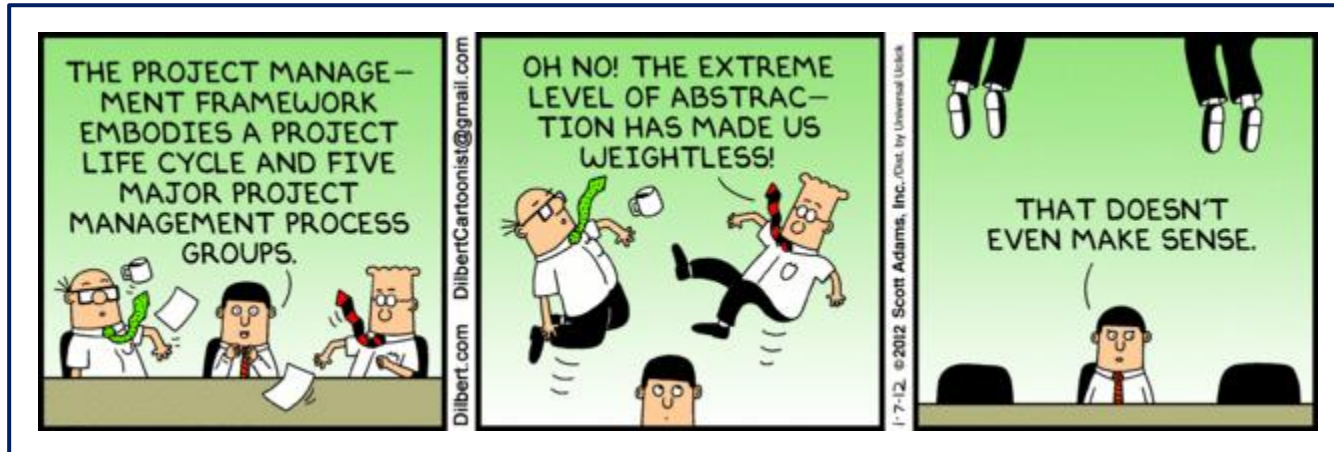
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Backup Slides

Why New DOC Acquisition Policy?

- **Current DOC policies (201-45, 1995 and 208-3, 1997) are relevant but implement cancelled OMB Circular A-109**

- **The new Framework (and MRB) requires tailored institutionalization as mandated DOC practice for all acquisition programs/projects**
  - Implements new oversight body for major programs/projects
  - Provides structure for coordinated oversight, review, and approval of planning, acquisition, and management of DOC programs/projects throughout the Department and regardless of project scope
  - Defines High-Profile Acquisition Program/Project

Guidebook Section on Procedures

- **Milestone Review Board (MRB)**
  - Board member questions
  - Presentation requirements
  - Timeline

- **Integrated Product Team (IPT)**
  - Membership—chair from OAM; team assembled with experts to help project succeed
  - Responsibilities
    - Review project milestone documentation; provide guidance
    - Prep MRB members
    - Prepare draft decision memorandum following MRB

- **Milestone Executive Secretariat**
  - Membership—OAM staff
  - Responsibilities
    - Schedules reviews
    - Establishes agendas and procedures
    - Distributes documents
    - Maintains documents
    - Prepares final decision memorandum

PM* Certification at Commerce

- **Currently**
  - DOC meets OMB's minimum requirement that PMs named in Exhibit 300's major IT programs be certified and implements FAC-P/PM certification requirements for PMs (IT and non-IT)
  - All non-IT PMs are encouraged, but not required, to be certified
  - Office of Federal Procurement Policy is investigating establishing equivalencies for Civilian agency recognition of DoD certifications
  - OMB vests each Agency with authority to develop certification processes for its acquisition workforce (e.g., PMs, Grants Officers, Systems Engineers)

- **DOC Next Steps***
  - Administer a PM survey (April 2012) to determine DOC PM cadre certifications from prevalent PM certification sources – FAC-P/PM, PMI, DAU, others?
  - Through the Functional Advisory Board (FAB)for P/PM, push to establish equivalency of FAC-P/PM certification with DAWIA as initiated by OMB in its FY 2014 budget guidance
  - Propose DOC PM certification equivalencies with commercial providers and other federal agencies
  - Finalize equivalencies and publish
  - Broadcast certification process and standards
  - Maintain accurate data on DOC-certified PMs in the PM CoP

* Process may be expanded to other career specialties (i.e., grants management)

Office of Acquisition Management

OAM Support to PMs

- **Cost analysis and estimates**

- **Systems engineering and its processes**

- **Program management processes**

- **Troubleshooting acquisition and procurement strategies**

- **Milestone document development support**

- **Independent reviews**

- **Domain expertise:**
  - Major Hardware Items (i.e., Satellites, Ships, etc.)
  - IT systems
  - Facilities

All support is non-advocate and confidential to the Program