

# Functions of the Standards Executive Office within Federal Agencies

Prepared by the  
National Institute of Standards and Technology  
for the  
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# Questions To Be Answered

- How do large agencies organize their Standards Executive (SE) function?
- What do these organizations do?
- How much is done by the HQ group, and how much is done by agency components?
- How do agencies consider and select voluntary consensus standards?
- What resources are necessary to fulfill the SE responsibilities for these agencies?

# The Study

- Four agencies interviewed
  - DOD, DOE, HHS/FDA, NASA
- We looked at
  - Agency authority
  - Function of SE's office
  - Standards management structure
  - Process flows
  - Noteworthy accomplishments
  - Resources
    - Personnel responsibilities
    - Budget

# Legislative Authority

- All agencies

- Public Law 104-113 (OMB Circular A-119)

- DOD

- Defense Cataloging and Standardization Act of 1952

- FDA

- Section 514c of Food, Drug and Cosmetics Act of 1993 (as amended)

# Agency-Level Authority

## ■ DOE

- DOE Order 252.1, “Technical Standards Program”
- DOE Directive G 252.1-1, “DOE Technical Standards Program Guide”

## ■ NASA

- NPD 8070.6B, “Technical Standards”, 5/7/2003
- “NASA Preferred Technical Standards Program Plan”, 4/15/1999
- NPG 7120.5B, “NASA Program and Project Management Processes and Requirements”, 11/21/2002

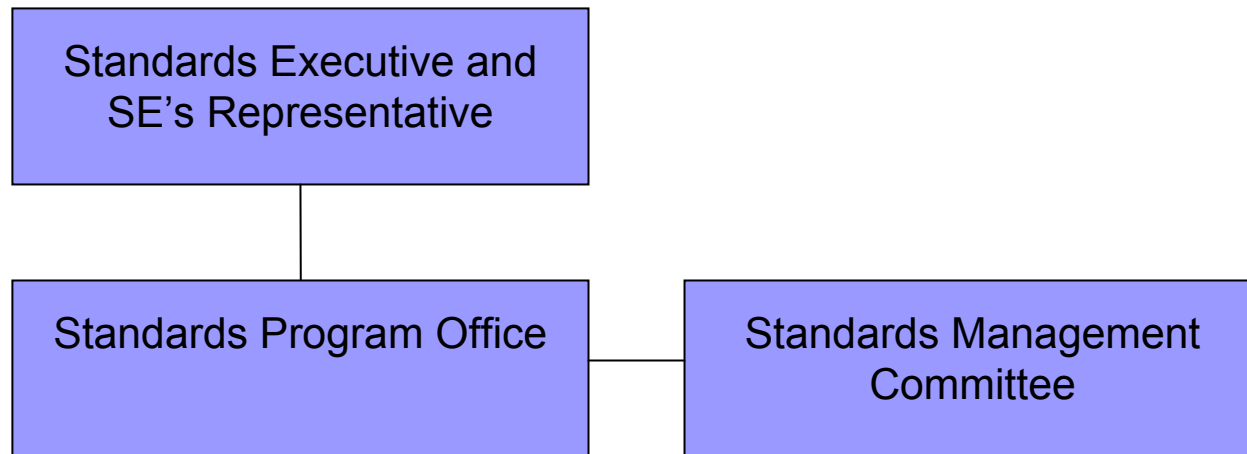
## ■ DOD

- DOD Instruction 4120.24, “Defense Standardization Program”
- DOD Manual 4120.24-M, “Defense Standardization Program (DSP) Policies and Procedures”
- Numerous policy memos and guidance documents

# Responsibilities of the Standards Executive According to OMB Circular A-119

- Promote effective use of agency resources and participation
- Promote development of appropriate agency positions on standards that
  - Are clearly defined
  - Do not conflict with each other
  - Are in the public interest
  - Are consistent with administration policy
- Assure agency participation consistent with agency mission, authority, goals, and budget
- Assure that agency participants understand and accurately represent agency positions
- Coordinate multi-agency committee participation
- Assure that necessary internal policies are in place for managing standards use and participation
- Cooperate with DOC/NIST in implementing the Circular, including the participant database
- Prepare agency input to OMB report
- Serve on the ICSP
- Develop processes for ongoing review and update of agency standards use
- Develop processes to ensure that participation is properly reviewed (legal, budgetary) for compliance with applicable law

# Standards Management Model: Program Similarities



- Administrative functions are largely centralized
- Standards development and review is decentralized; conducted at the level where standards are required

# Standards Management: Central Office Functions

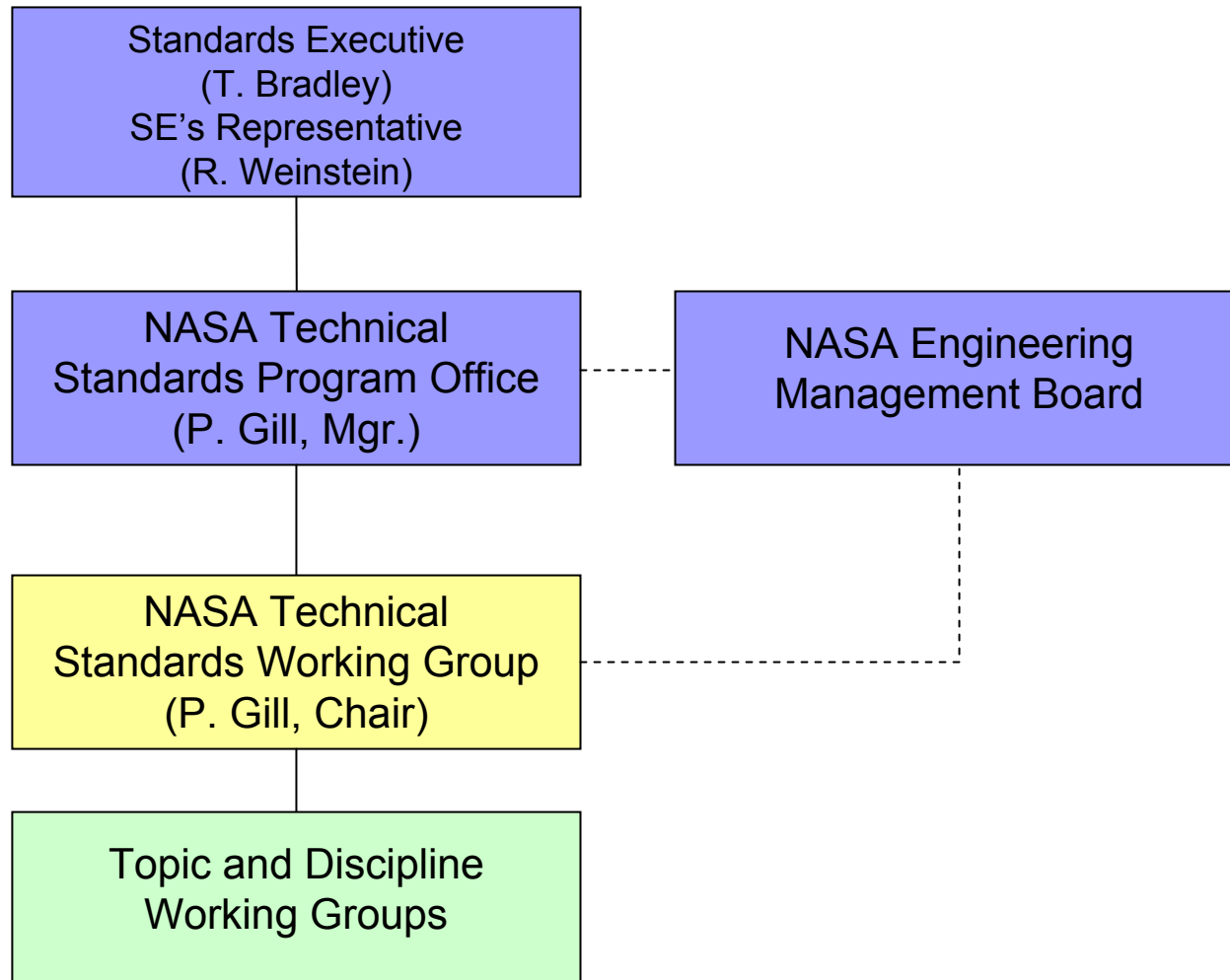
- Provide policy-level oversight of standards activities
  - Includes maintenance of policy documents
- Provide structured processes for
  - Flow of technical information relating to standards selection/development
  - Liaison relationships with private sector standards developers
- Maintain agency standards web site
- Serve as chair for agency standards committees (technical and/or management)
- Support ICSP activities; attend meetings as required
- Help resolve internal disagreements over standards
- Publicize importance of standards activities both inside and outside the agency



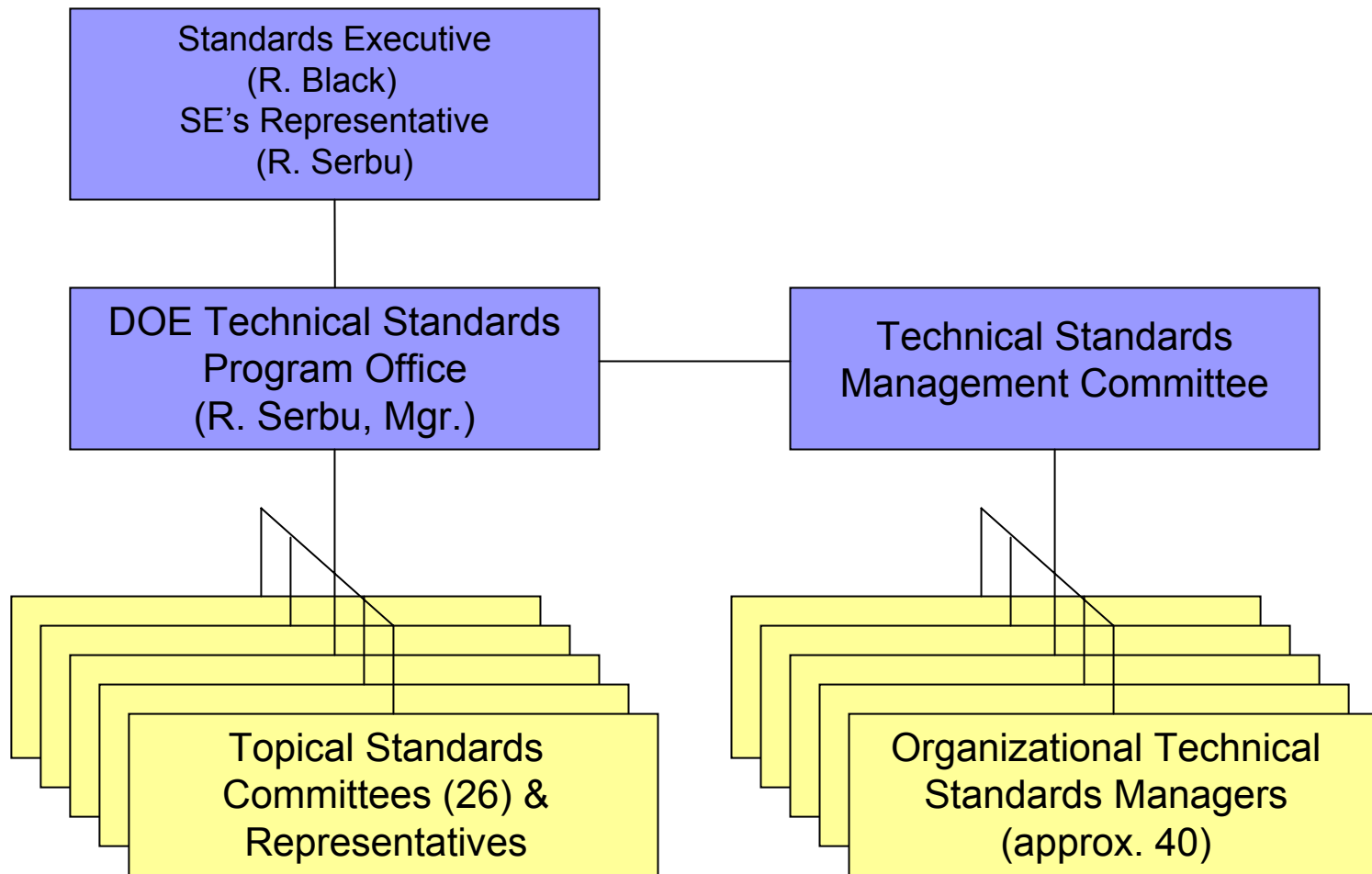
# Specific Responsibilities of Standards Program Office Staff

- Program/project management
- Communications, public relations, publicity
- Publications
- ICSP support
- IT support
  - Database management
  - Web site management
- Administrative, clerical

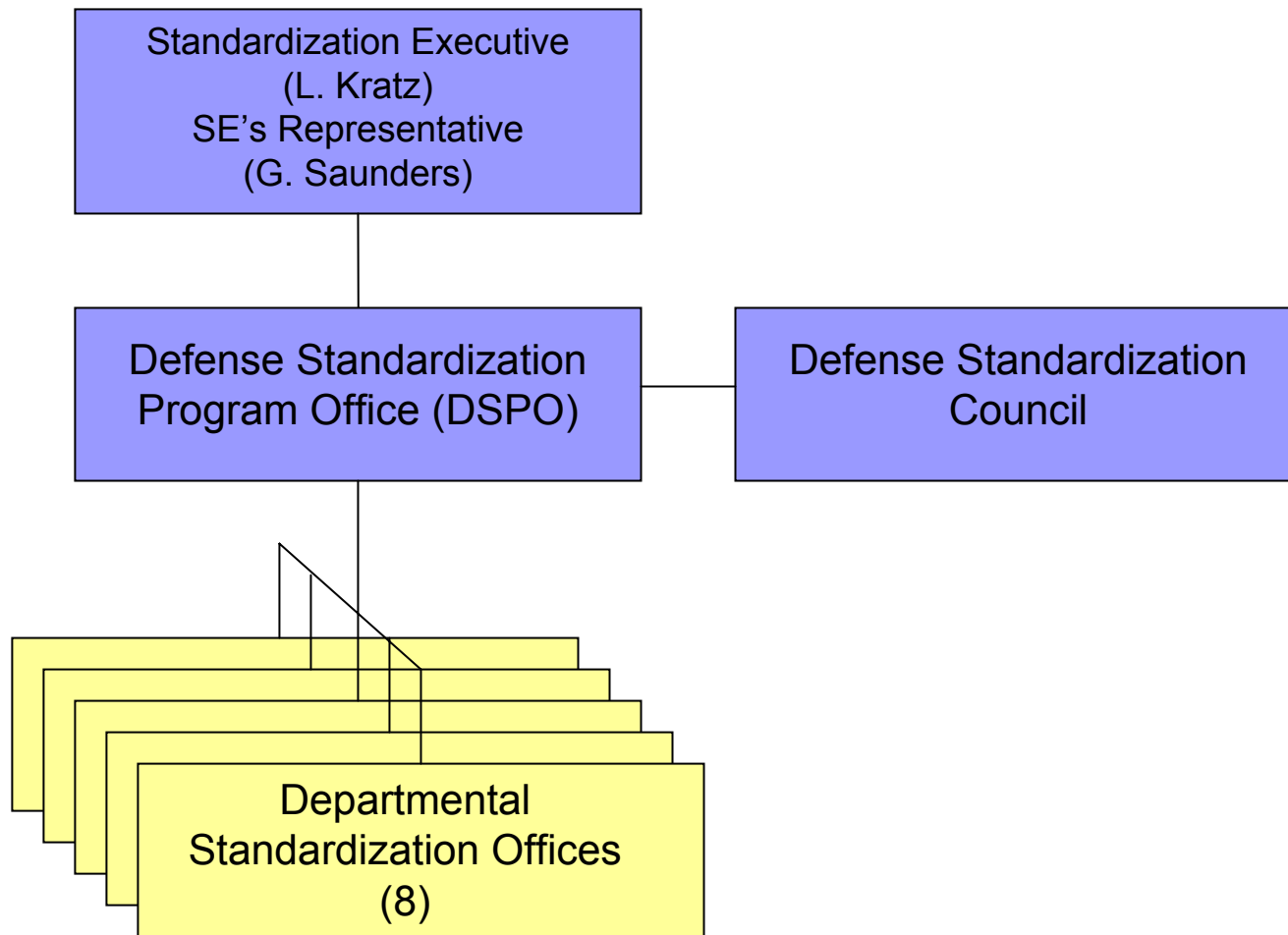
# Program Model - NASA



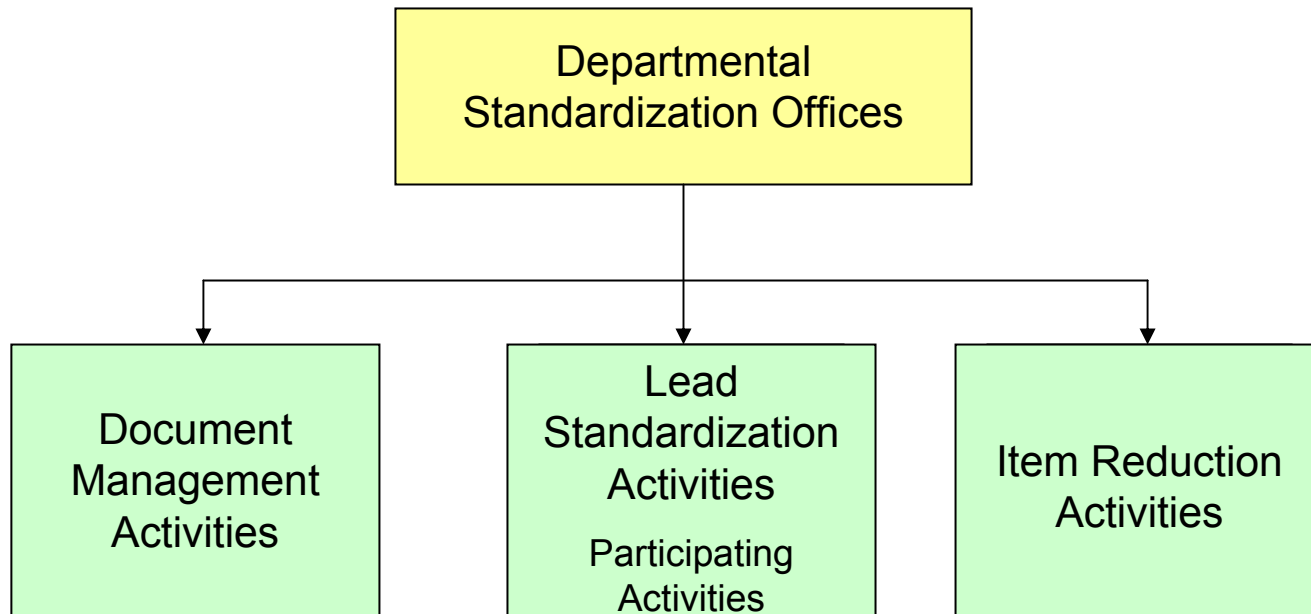
# Program Model - DOE



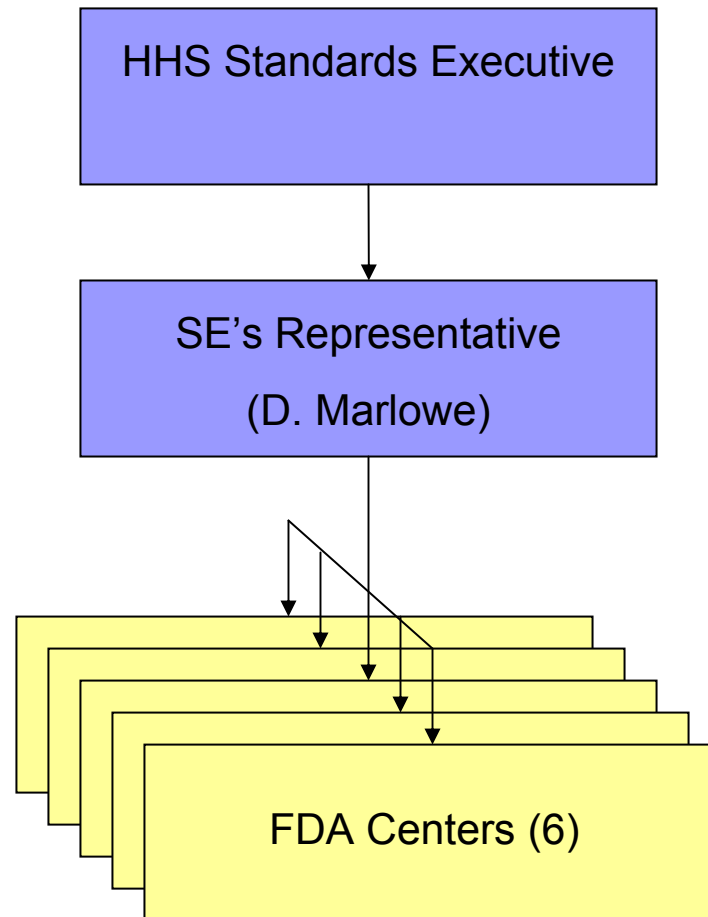
# Program Model - DOD



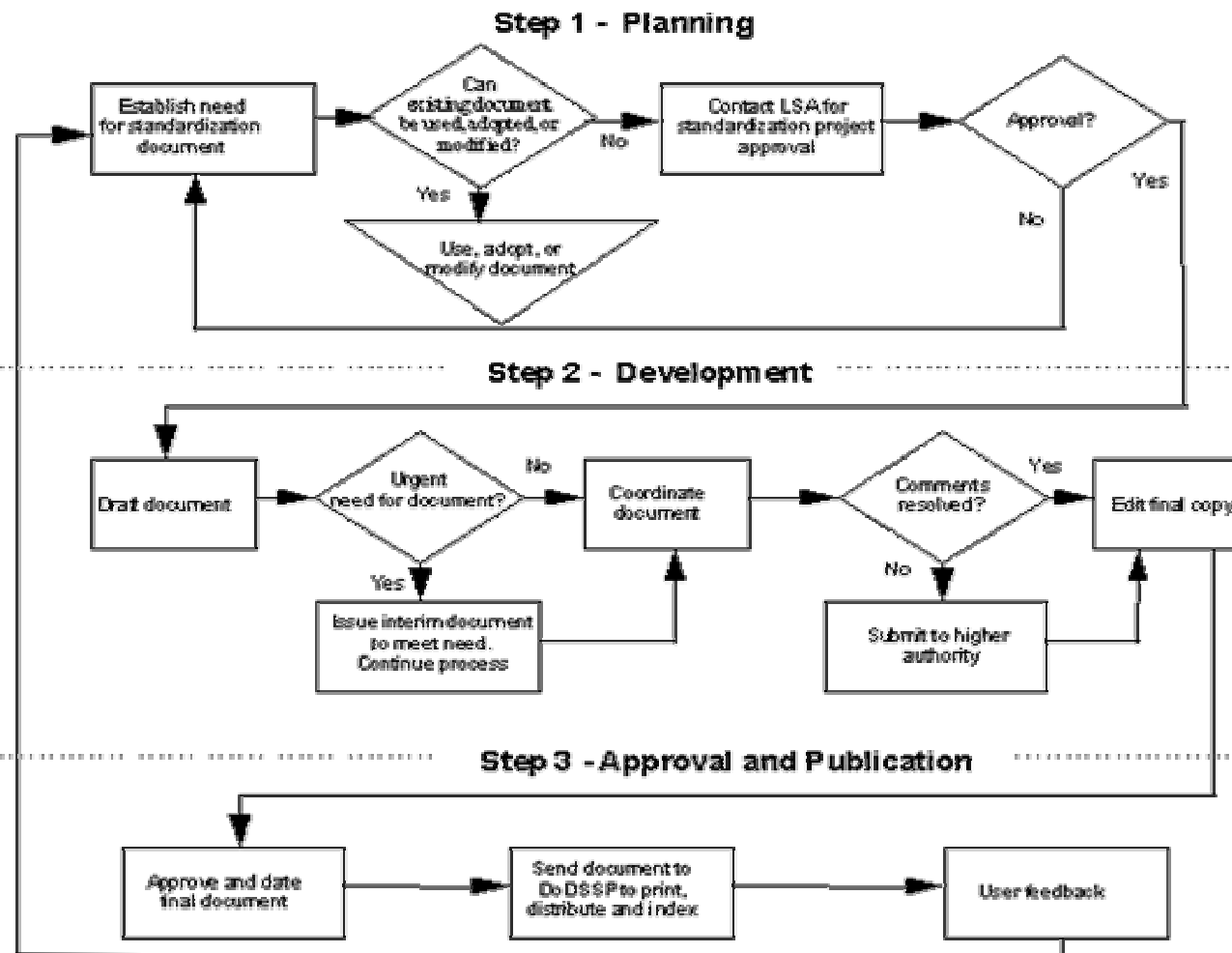
# DOD Departmental Standardization Offices (DepSOs)



# Program Model - HHS



# Process Flows



# VCS Selection/Vetting Processes

Agency	Reviewed by	Approved by
DOD	Adopting Activity	Adopting Activity/Lead Standardization Activity
DOE	Preparing Activity, Technical Standards Manager, TSPO	SES-level manager
HHS	Individual centers	Individual centers
NASA	Technical Standards Working Group	Engineering Management Board

- In all cases,
  - When need for a standard is identified, consideration of available VCS standards occurs early in the process.
  - Decision to select VCS is based on rigorous technical review process



# Key Characteristics of an Effective Standards Executive Capability

- Legislative authorization
  - Recognizing importance of standards
  - Good foundation on which agency can develop its own documented policies
  - Legislative authority referenced in agency policy
- Top-down support for standards activities
  - Recognition of outstanding work
  - Resource support
- Good internal communications
  - Regular meetings of TSPOs with Technical Management Boards and/or working groups
  - Coordinated efforts

# Key Characteristics of an Effective Standards Executive Capability (Cont.)

- Significant funding for special projects
  - Provides flexibility
  - Provides temporary resources, special skills & expertise to address core work
  - Presents opportunities to start new initiatives
  - Used to create productivity-enhancing products

# Key Characteristics of an Effective Standards Executive Capability (cont)

## ■ Effective websites

- Make policies and procedures readily accessible
- Facilitate identification of available standards
- Facilitate technical discussions
- Provide interactive knowledge management tools

# Knowledge Management Tools

- NASA's Technical Standards Management System
  - User transparent access to full text standards from many sources
  - Extensive data on system and standard use
  - Standards development, review, and management support
- DOE's Technical Standards Information System (TSIS)
  - Database for tracking standards use and participation with SDOs
  - RevCom for TSP - Allows for online review and comment on developing standards
- NASA's Standards Update Notification System (SUNS)
  - Online notification of revisions/re-issuance of standards
  - Facilitates replacement of out-of-date standards
- NASA's Lessons Learned/Best Practices database
  - Documents specific problems, offers guidance from previous users of the standard

# Topical Committee Structure

- Offers stability - not affected by organizational, funding changes
- At DOE, topical committees are formally structured
  - Chartered for 5 years
  - Boards, documented charters, etc.
  - Have own unique websites
- Work directly with SDOs
- Other agencies
  - NASA has Topic and Discipline Working Groups
  - DOD Committees called “Domain Boards”

# Annual Awards Ceremony (DOD)

- Demonstrates high-level recognition of standards work
- DSPO reviews nominations (5) from each service or agency
- Individual and team efforts honored
- “Perks”
  - Articles placed in winners’ local papers
  - Trip to Washington, DC
  - Winners’ base commanders are present at ceremony
  - Top prize is \$5,000 cash award
- DOD case studies derived from nominated/winning projects



# Traditional Stumbling Blocks

- Low appreciation for importance of standards
  - Standards typically operate “below the radar”
  - Difficult to quantify benefits of standardization work
- Challenge to maintain current funding levels
  - In times of crisis, standardization is often viewed as a relatively low-risk place to cut funding
- Competition for time of technical experts
  - Competing priorities
  - Lack of consistent recognition of activities by management chain

# Standards Program Office Resource Commitments

Agency	Centers <sup>1</sup>	SPO FTEs	Total Budget (\$)	Project Funding <sup>2</sup> (\$)
DOD	8	12	5M	2M
DOE	40	3	750K	200K
HHS	6	0.5	--	--
NASA	14	5.5	2M	1.2M

<sup>1</sup> Includes all agency components as well as contractor organizations represented on committees governing standards activities

<sup>2</sup> Project funding is allocated from within the total budget. It is not a separate (i.e., additional) budgeted sum.



# Agency SE's Advice for DHS

- Draft a strong directive with clear authority
- Have an independent office for the SE
  - Unique budget authority
  - Consolidate standards licensing
  - Provide external interface to other agencies, SDOs
  - Resources for participation in international organizations
- Select a strong SE
  - Impeccable credentials, respectable title
  - Excellent facilitator – not a technical expert

# Agencies' Advice for DHS (Cont.)

- Infuse importance of standards throughout organization
- Use topic-based committee structure
- Establish effective electronic communications
  - Uniform distribution of information
  - Bypasses disinterested middle managers