

### Military Handbook 881 Work Breakdown Structure Update

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# **Update to incorporate DoD changes in Acquisition Policy and Guidance**

- Task 1: Update for DoD 5000 changes
- Task 2: Identify how the WBS can support each acquisition phases and the actions necessary to enter and exit successfully
- Task 3: Reflect changes to new and improved approaches to product development (i.e., IPTs)
- Task 4: Show how WBS is developed and maintained throughout the life cycle to meet program management goals as well as cost, schedule and technical objectives
- Task 5: Show how the WBS is the common link which will unify the planning, scheduling, estimating, budgeting, configuration management and performance reporting disciplines



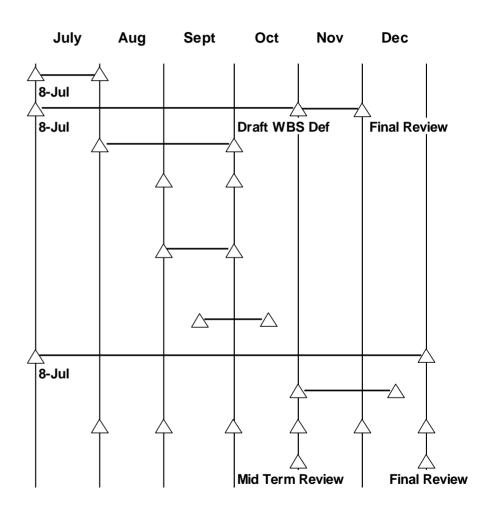
### **Schedule**

#### Task

- 1. Update to Include DoD Policy and Guidance
- 2. Add/Improve on WBS Definitions
- 3. Used with newer terms and policies
- 4. Characterized as an Acquisition tool
- 5. Support Budget, Cost, Schedule, Technical, Contractual, and Program Management
- 6. Integration with Program Management, Systems Engineering, Contractual and Cost Estiamting Documents
- 7. Ensure Industry Participation
- 8. Format for Web Access

**Monthly Progress Reports** 

**Government Review** 





### **Expectations**

#### Integrating with current AT&L and DCARC activities

- New procedures and requirements being considered that affect the use of the WBS in both CPR and CSDR
- Become involved with working groups already making changes to CPR and CSDR processes that affect the WBS
- Ensure Handbook becomes a comprehensive guide for Industry and Government

### Outreach support

- Work with major DoD organizations to get the inputs needed to make the Handbook a government and industry wide document
- Use participation in all major professional associations
- Leverage relationships to gain insight, lessons learned and new innovations and ideas for better execution



## Task 1: Add/Improve upon WBS definitions

- Update definitions to reflect advancement of technology in design, development and manufacturing
  - Heavier reliance on software
  - Commercial-off-the-shelf items

(Status: Working groups formed to address issues working with other contractor representatives)

- Establish a Working Group consisting of Government and Industry to review at least the following appendices and provide comments and potential revisions
  - Aircraft specifically UAVs
  - Space Multiple definitions NASA, NRO, DoD, etc.
  - Ships Waived for CSDR no longer

(Status: Working groups formed, initial response due 10 Sept. Meetings to be held week of 20 Sept)



## Task 2: Clarify how WBS is used with newer terms and processes

#### System of Systems/Family of Systems

- Clarify terminology and highlight examples of how the WBS is created given the requirement for system interaction and interoperability
- Show example of Systems WBS

#### Spiral/Evolutionary Development (Hardware/Software)

- Each spiral provides new functionality which could be considered product oriented, but better definition is required
- Will define terminology and provide examples of how the WBS is created given an evolutionary requirement. (Process is already defined in the software WBS description --- most software engineers used spiral development to create software in the early 1990's)

### Risk Analysis

- Description of risk analysis use with WBS
- System Engineering use to trade cost, schedule and technical risk of the system to meet end-item requirements

(Status: Collecting information for inclusion in document)

# Task 3: Ensure the WBS is characterized as an Acquisition tool

- To decrease the use of multiple WBSs used by different functional areas, define the WBS for all practical uses:
  - Cost Estimating
  - EVM
  - Database
  - Scheduling
  - Requirements planning, etc.
- Establish group of system engineers, cost analysts, logisticians, earned value management technicians, program managers and contracts personnel to agree and commit to one approach defining and using the WBS for program support
  - Maintain a product oriented WBS reporting at level 3 (except for high cost, high risk or technology driving elements)
  - Communicate result by follow on training

(Status: Starting to contact appropriate associations)



# Task 4: Support Budget, Cost, Schedule, Technical, Contractual and Performance Management

- Identify DoD 5000 has mandated certain reporting functions that rely on the WBS
  - Contract Funds Status Report
  - Contractor Cost Data Reporting
  - Earned Value Management
- Use example (e.g., Joint Strike Fighter)
  - Demonstrate how acquisition reports will track to each other if a single WBS is used
  - Show relationship to
    - CLIN
    - SOW
    - Requirements
    - IMP/IMS

(Status: Not started)



# Task 5: Integrates with PM and SE Documents, Contracts and Cost Estimating

- Re-enforce the use of the WBS via example
  - Show that without the WBS, the IMP/IMS relationship to other acquisition artifacts would not be possible

(Status: Not started)



### **Ensure Industry Participation**

- Involve those who are affected by the changes by having them participate in making those changes
- Embrace as many joint industry/government associations as possible to get buy-in and feedback
  - Task 1&2: Working groups comprised of functional experts to re-examine WBS definitions proposed for review
  - Task 3: Use Govt and industry representatives to ensure all aspects of WBS application and usage are considered and reflect real life situations
    - Program Management: Project Management Institute (PMI)
    - System Engineering: International Council on Systems Engineering (INCOSE) and National Defense Industrial Assoc (NDIA)
    - Cost Estimating: Society of Cost Estimating and Analysis; Cost and Software Data Reporting (CSDR) Focus Group and Space Systems Cost Analysis Group (SSCAG)
    - Earned Value Management: PMI's College of Performance Management and NDIA's Program Management Subsystems Committee
    - Logistics: Society of Logistics Engineers (SOLE)
    - Contract Management: National Contract Management Association (NCMA)
  - Tasks 4&5: Use DAU to ensure changes reflect understanding and communication of the revisions to DoD 5000 processes and terminology affecting the WBS