TM ACQUISITION AND POLICY

GOVERNMENT
IN THE BEGINNING
ACQUISITION KEYS

• FUNCTIONALITY DETERMINATION
• BUSINESS RULES
  – Specification decision points, authoring rules (based on functional requirements),
• IPRS/QUALITY ASSURANCE
  – Flexibility is the key.....
POOR ACQUISITION RESULT
DOD has issued guides—that are voluntary for the program managers to use—to improve technical-data decision-making. These guides may help program managers with decisions and documentation on technical data. However, DOD technical-data policies remain unclear. Effective internal controls help organizations implement their directives. GAO found that, because DOD has not issued clarifications to its policy, DOD policies that require documentation of long-term technical-data needs are unclear. As a result, acquisition strategies have not always documented required information on technical data—a point the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics recently emphasized.

GAO Study GAO-11-469 of MAY 2011
DoD POLICY

The primary objective of Defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price.

• Department of Defense DIRECTIVE NUMBER 5000.01
DoD POLICY

• C1.2. PURPOSE

• C1.2.1. The purpose of this Manual is to provide a uniform approach to the acquisition and management of data required from contractors. The procedures are intended to provide data management tools necessary to minimize and standardize data requirements that will be included in DoD contracts.

•  DoD 5010.12-M, May 1993
DoD POLICY

6.3.8 Technical Documentation. Technical data will be maintained by the best value engineering service provider, and will interface with Service Enterprise Systems. It will be available for real-time update and for “on-demand” download to portable maintenance aids. Technical manuals will be prepared consistent with SD1000D, “International Specification for Technical Publications Utilizing a Common Source Database.”

USD (ATL) Product Support Boundaries Memo 23 Sept 2004
• In keeping with the guidance outlined in references (a) and (b), all NAVAIR Program Managers shall consider S1000D as the specification of choice for new acquisition programs. Use of other than S1000D on a new acquisition ACAT I or II program will require a waiver from the Aviation Readiness and Resource Analysis Department Head (NAVAIR 6.8). Enclosure (1) provides implementation guidance for assistance in choosing an approved alternative standard. ACAT III and IV programs may choose MIL-STD-3001/MIL-DTL-81310 if supported by the business case.

• Program Managers shall:
  • (1) Select the appropriate IETM development specification based on an analysis of functional requirements and cost benefits. The use of other than S1000D on an ACAT I or II program will require a waiver request to be submitted to NAVAIR 6.8 via the Logistics Product Data Division (NAVAIR-6.8.5). The waiver must receive approval prior to the program office proceeding with Technical Manual/IETM development.
SERVICE POLICY LEADS

• Mr. Ed Tokarz – USMC
• Mr. Kevin Paulson – ARMY
• Mr. John Junod – NAVSEA
• Mr. Mark Kammer – AIR FORCE
• Mr. Bob Sharrer - NAVAIR
TECHNICAL MANUAL CONTRACT REQUIREMENTS (TMCR)

• The TMCR is the vehicle used for procuring technical manuals for weapon systems, equipment, missiles, components and support equipment.
• Initiates the development of new TMs or change or revision to existing TMs.
• The TMCR package specifies the detailed user and system requirements, functional requirements, the change, revision or update orders, and if applicable, a support agreement for outside work.
• Used to provide the basis for the funding required for updating and sustaining the technical manuals.
TMCR (cont.)

- Describes the services to be performed (the “what, how, when, and where” contractual specifics) including a comprehensive listing of source data to be provided by the contractor.
- Remember to be sure that what you ask for in the TMCR is exactly what you want, because that is exactly what you are going to get.
- When developing the statement of work requirements, it is important that the customer and the contractor work as a team and stay in constant communication.
- Whenever there is a conflict between what you intended and what is in the TMCR, what is written will win.
TMCR QUESTIONS

- What business rules are required for the project?
- What functionality is required (functionality matrix)?
- What are quality assurance requirements?
- What issue of S1000D will be used?
- What maintenance levels will the IETM support?
- What types of information data sets will be developed?
- Will any of the data be provided in a paper?
- What type of system/equipment is the IETM being acquired for and what specific type of acquisition is required for the project?
  - Major Weapon System, Support Equipment/Test Equipment or other type.
  - Is it for a new acquisition, major revision, update, conversion of legacy data from paper to digital data or a conversion from a legacy standard to S1000D.
TMCR QUESTIONS

• What is the scope of the applicable project? A statement should be included in the TMCR such as
  – “The requirements contained in this Technical Manual Contract Requirement (TMCR) apply to all technical manual information required for the support, operation, and maintenance of the project.”

• How will the technical manual data for the system/equipment be packaged?
  – S1000D permits total flexibility in the way technical manual information can be published and packaged to meet specific user needs. A publication can be comprised of all the information data sets developed for the system/equipment or can be a subset or equal to an entire information data set or, may be a superset of several information data sets.
TMCR QUESTIONS

- Will additional technical manual data be required to supplement the IETM?
- Is Government Furnished Documentation/Software necessary for TM development?
- What program phase will the TMCR be written to support?
- What is the period of performance for the TM program?
- Who is the logistic element manager (LEM) for the project?
FUNCTIONALITY REQUIREMENTS

• Data driven functions
• Viewer driven functions
• External hardware driven functions
• External software driven functions
• For all but data driven functions
  • Address the specific components required (ID GFE/Contractor furnished)
  • Information assurance requirements
  • IT certifications required
  • Plans to resource each area as required
  • Level of connectivity between systems
BUSINESS RULES

• Ensure you have and understand higher level rules for spec decision points
  – Joint Service
  – Service Specific
  – Syscom Specific (if applicable)

• Develop Program/Project level rules
  – Consists of spec decision points not addressed in higher level rules

• Develop any other rules
  – Authoring, Delivery/Output, Exchange, Data Integrity/Management, Legacy Data
SPEC BUSINESS RULES

• Issue of the Specification to be used
• Maintenance Level for data
• Model Identification Code
• System Difference Codes
• Data Module coding strategy
  – Information codes and sets
• Standard Numbering System (SNS) structure (LSA based?)
OTHER RULES

• Single PM or multi-PMs
  – Data reuse (reusing DMs within other PMs)
• SW updates: Planned and unplanned.
  – Who performs?
  – SysAdmin requirements for fielded system... again, connected, or disconnected?
  – Automated update/distribution: Don't forget about non-S1000D data that must be managed.
• Data deliveries
  – Any test assets?
  – Will content deliver only for production representative equipment?
  – Val/Ver on test assets... if not production representative across the board, can they be used for components/systems?
  – How will determination of prod representative system be made? Pre-product baseline change management (have a plan).
  – At what point does S1000D applicability authoring apply to delivering content?
OTHER RULES

• Op checks and level of granularity:
  – Be cautious of op checks authored within sub-tasks.

• Val and ver requirement for procedures (including referenced procedural content) to be supported in IETM execute mode.
  – Forced linking: Yes, or no? Authoring rules apply (not project level BRs). IETM may be unsupportable in execute mode if not thoroughly addressed up front.

• Smart products:
  – Will system generate data that must be consumed/referenced for IETM troubleshooting/FI?
  – If yes, is SW solution being integrated with IETM?
DMRL

• Get a DMRL early
  – Understand that it's a moving target, but a constant point of comparison (what's been delivered vs. latest DMRL).

• Determine How will DMRL be maintained and delivered throughout the PoP leading up to final delivery.
  – OEMs tend to wedge content within the CMS, and this causes problems when an updated DMRL must be generated with each content delivery.
DELIVERY/SCHEDULE

• OEM Delivery schedule or tracking system for PM/DM deliveries:
  – The Content Management System (CMS) does not care about a delivery schedule.
  – If schedule reassurance is an issue determine:
    • how data provider will track schedule for PM/DM deliveries
    • how will Govt have visibility.
QA

• Agree early on what 30/60/90 really is
  – Make plans for more than three IPRs. As many as it takes for data to be accurate/adequate.
  – Relating 30/60/90 to DM totals is a flawed approach
• Develop Govt process/system to track the status of every generated discrepancy:
  – What is the status of Gov’t review for each and every delivered DM
  – What is the process to identify changes in subsequent deliveries and QA any changed content from one delivery to the next
  – What system(s) are capturing results and feeding back to data provider for resolution
  – Does the master discrepancy tracking system exist on Gov’t or OEM side
    • (I strongly recommend Govt). A good data point here is 2-3 discrepancies per DM
QA

• Val/Ver Status
  – Who's tracking what, and how
    • OEM technically cares only about val
    • Govt’ cares that val is completed and then cares about the ver
      – unless schedule forces combined val/ver, then there has to be some teaming in how this is accomplished and tracked to meet DCMA requirements, while satisfying QA requirements

• What is the process/system for identifying all procedural DMs within the delivered content and tracking stat of each
  – Ensure that Govt and OEM know overall story and workload compared to schedule?
  – Contractor needs access to this info to perform data updates (1st/2nd val... see below) as required, so users.reviewers can know val/ver status in presentation environment
  – System needs to track/report daily status of val and ver (pass, fail, not attempted, non-workable, and more)
  – Programs need to determine if val/ver fails will be signed off with desktop reviews, or if a trip back to the product for on equipment re-val/ver will be required
    • If this detail is tracked (to save having to coord on-equip v/v, how is this detail being tracked?)