

Technical Data Goals

Background – DoD has ~50 years of collecting historical cost and software data as part of the CSDR process, NOT technical data which is required for cross program complexity assessments

Objective

Implement technical data reporting as part of the CSDR process

Work Products

Data Item Descriptions (DIDs) – Instruction for reporting technical, quantity, and repair parts data

DD Forms – Reporting forms and XML schema

Technical Commodity Templates & Business Process – Templates to standardized the technical data planning process for all commodities

IT Infrastructure to integrate Cost and Tech. Data – Ability to ingest data into the CADE infrastructure to allow quick data collection and visualization

Technical and Software Data Focus Group

When & Where

- May 24, 2016, 8:30 am – 4:30 pm
- SAFTAS Conference Center, 1550 Crystal Drive, Arlington, VA 22202. Paid parking is available in the garage under the building.

Registration

<http://portal.tecolote.com/dcarc/FocusGroupRegistration.aspx>

please provide the information requested and submit.

Who

- Chief Engineer/Software Engineers/Company IT POCs for Technical and Software Data Management
- Please send your representatives/POCs to Brandon Bryant at (571) 372-4273, brandon.s.bryant4.ctr@mail.mil to be included in our invitation

Topics

- Technical data collection initiatives (Technical, Quantities, O&S Repair Parts)
- Updated Software Resources Data Report (SRDR) Data Item Description (DID) (Development and Maintenance)
- How is technical and software data generated and captured in contractor IT systems?
- What is involved with generating technical and software data reports?

Call for Industry Presenters

- Looking for industry representatives to discuss their processes and systems used to collect and manage technical and software data
- To coordinate attendance and presentations please also contact Brandon Bryant

SAFTAS Access

Meeting attendees must provide a Visit Authorization Request (VAR) through the Joint Personnel Adjudication System (JPAS) as follows:

- Reason for Visit: (CADE Focus Group)
- POC: (Debbie Cann, Cathy Ferguson, CADE Focus Group)
- POC Phone: (204) 612-5550, (571) 372-4260
- VISITED SMO: 3BM515 - ALION SCIENCE (SAFTAS)
- First Day of Visit: May 24, 2016
- Last Day of Visit: May 24, 2016

If you do not have a JPAS account, your company security manager needs to send a SIGNED VAR (visit authorization request) letter to the Conference Center via FAX at (703) 253-1385 or email to DL-SAFT-ConferenceFacility@saftas.com (Submissions must be sent by the security manager signing the letter.) VAR letters should be on company letterhead and include:

- | | |
|---|---|
| • Full legal name (Last, First, Middle Initial) | • Need-to-know signature from the Contracting Officer's Technical Representative (COTR) |
| • Social Security Number applicable | • Full organization address (include |
| • Date of Birth (Day-Month-Year) | • CAGE code if |
| • Place of Birth | • Purpose of visit (CADE Focus Group) |
| • Clearance Level | • POC (Should be the technical POC-Not Security or Visit Control) |
| • Agency Granting Clearance | • Dates of visit: 2015-Oct-06 |
| • Date of Clearance (Day-Month-Year) | • Voice phone number |



Agenda

OSD CAPE

	Presentation	Presenter
8:30-9:00	Sign-in/Seating	Brandon Bryant
9:00-9:45	CADE Update	Bess Dopkeen
9:45-10:15	Technical DID Overview	Greg Hogan
10:15-10:30	Break	
10:30-11:00	Technical/Quantity Data	Charlotte Tarr
11:00-12:00	O&S Repair Parts Data	Sandi Enser/Paul Hardin/Jennifer Bowles/Lisa Mably
12:00-1:00	Lunch	
1:00-1:30	Software DID Overview	Ranae Woods
1:30-2:30	Development SRDR Implementation	Crystal Rudloff/Peter Braxton
2:30-2:45	Break	
2:45-3:15	Maintenance SRDR Implementation	Crystal Rudloff/Peter Braxton
3:15-3:45	ERP SRDR Overview	Rich Mabe
3:45-4:15	SURF Overview	Nick Lanham
4:15-4:30	Closing Remarks	Daron Fullwood

Technical Data Report MGMT DID

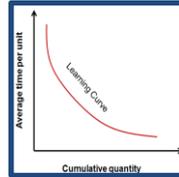
OSD CAPE



TECHNICAL

- Technical Parameter Name
- Unit of Measure
- Value
- Part ID #
- Estimate/Actual
- Group Key
- Margin
- Value Source
- Unit of Measure Qualifier
- Comments

Report Frequency by Design Gate



QUANTITY

FORMAT 2 (1921-Q)

- To Date/At Completion Units:
 - Lot/Block
 - Units Completed To Date
 - Units in Process
- Model/Variant/Flight
- At Completion QTY
- Internal QTY
- Concurrent QTY
- GFE Units
- Comments

Report Frequency by Cost Report



REPAIR PART

FORMAT 3 (1921-R)

- Repair Event
 - System/End Item Data:
 - End Item Number
 - Model/Variant
 - Failure Data:
 - Non-Mission Capable
 - Scheduled Event
 - Failure Code
 - Failure Code Description
 - Repair Data:
 - Start/Completion Date
 - Maintenance Type/Level
 - Man Hours
 - Labor/Material Cost

Report Frequency by Cost Report



Software Data Update

OSD CAPE

SRDR DID STATUS:

- Government and industry review of Data Item Descriptions (DIDs) complete
- Submitted to WHS for approval

MAJOR DID UPDATES:

- Changes Enhance all Cost/Effort, Size, and Schedule visibility
- Consolidated Initial and Final Developer Report DIDs (currently two separate) into one DID establishing Initial, Interim, and Final reports
- Established software maintenance reporting
- Final Report time phased by month

SRDR CAPE IT DEVELOPMENT EFFORT:

- Draft SRDR Data Item Descriptions DIDs were developed by a joint service working group

SRDR Visual Analysis Tool | User Guide | Available Data

For ESLOC Views, Enter ESLOC Assumptions

Physical/Logical SLOC Factor	2
Modified ESLOC Factor	
Reused ESLOC Factor	
Auto Generated ESLOC Factor	

Filter Data	Selection
Counting Method	Normalized to Logical
Report Type(s)	All Reports
Service	Any
% New Program	Any
Development Process	Any
Primary Contractor	Any
Location	Any
Commodity	Any
Application Type Group	Any
Primary Application	Any

Filter Data

- Experience Level %
- Language
- CMM Level
- Peak Staff
- Requirements
- Interfaces
- Requirements Volatility

Clear Filters

Category: Effort (Hours) | View: Hours vs SLOC | All Data | Primary Development Process | Y-Axis Metric: Hours per SLOC

Hours vs SLOC (N=191)

Final Crosswalk - Development SRDR

Cost Estimating Need	Current SRDR Issue	New SRDR Requirement				
Estimate by CSCI (SW Size, Effort, Description, Schedule)	Lack of Visibility	CSCI-Level Reporting				
Standard size measures based on different system types (MDAP vs ERP)		ERPs RICE-FW, all else SLOC				
Consistent logical DSLOC data by language to support Size and Effort		Use Aerospace Unified Code Count (UCC) , standard code counter; Use IFPUG for Function Points (FPs)				
Requirements as Size/Effort driver		Standard, clear Requirements counts				
Understanding of degree of effort for reused code relative to new code	Lack of Visibility	DM/CM/IM % or AAFs				
Ability to estimate "full-up" SW effort		Prototype vs Production Representative Use ISO 12207:2008 Activities				
Dollarize SW effort estimates accurately		Direct and Indirect Costs by CSCI in SRDR				
Accurately time-phase SW Dev estimates		Report Monthly Effort in Final SRDR				
Phasing, Software Growth relationships		Require Interim Reports				
Stratify software efforts by Complexity, a key driver of effort (Productivity)	Too Complex	Reduce Application Domains from 119 to 17				
Capture Analyst Capability Productivity Impact	Subjective/Little Value	Remove Experience requirement				
Changes Enhance all Cost/Effort, Size, and Schedule Estimating Approaches: Analogy, Parametric, Commercial Models		<table border="1"> <tr><td rowspan="3" style="background-color: #003366; color: white; text-align: center;">Industry Impact</td><td style="background-color: #d0e0d0;">✓ Low Impact (Reduced <u>Reqt</u>)</td></tr> <tr><td style="background-color: #d0e0d0;">✓ Medium Impact</td></tr> <tr><td style="background-color: #d0e0d0;">✓ Significant Impact</td></tr> </table>	Industry Impact	✓ Low Impact (Reduced <u>Reqt</u>)	✓ Medium Impact	✓ Significant Impact
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