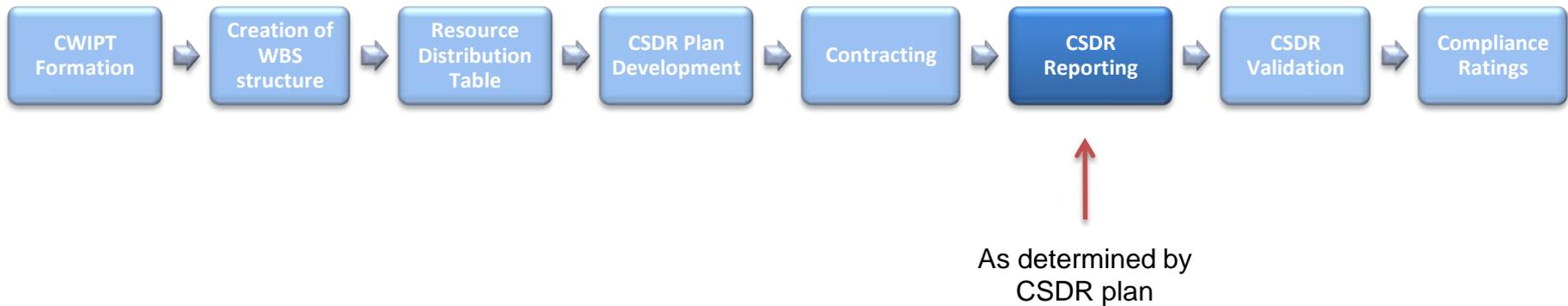




CSDR Reporting

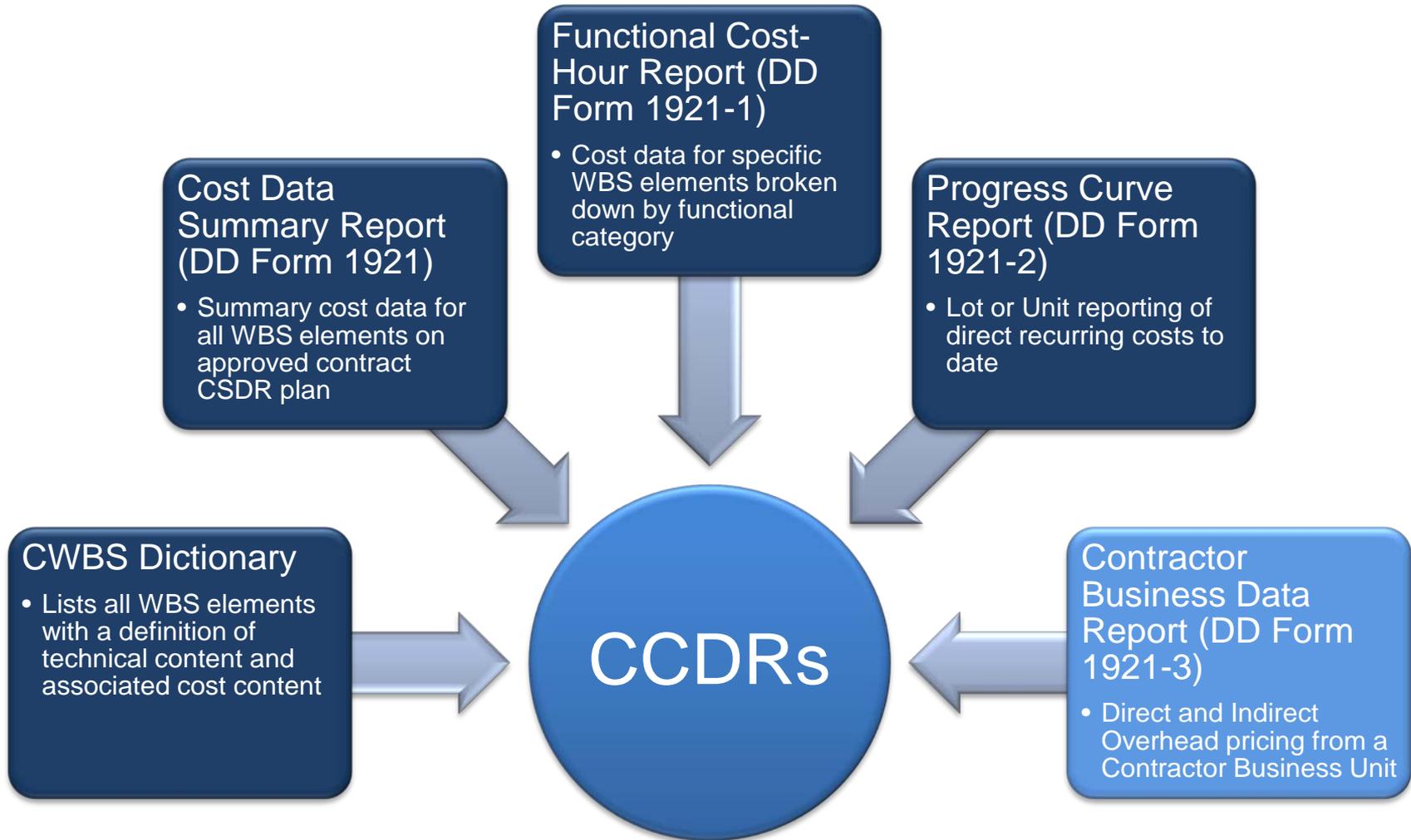
OSD CAPE





CCDR Reporting

OSD CAPE





SRDR Reporting

OSD CAPE

- Software Resource Data Reports (SRDRs)
 - Lists software size, effort, and schedule over the project life-cycle
 - Data reported is further explained in a data dictionary that is required with the submission
 - Initial Developer Report - due at the beginning of project increment
 - Final Developer Report – due at the completion of project increment

SRDRs

Initial
Developer
Report

Final
Developer
Report



Data Item Descriptions (DIDs)

OSD CAPE

- Provide detailed instructions on how to complete a CWBS Dictionary and CSDRs
- Can be found on the DCARC website at the following link:
<http://dcarc.pae.osd.mil/Policy/csdrReporting.aspx>
- The correct DID version for a report can be found in the contract CDRLs

DIDs should always be used when creating DCARC documents



CWBS Submission

OSD CAPE

- Provides definitions unique to the firm's effort that describe technical and cost content for each WBS element
- CWBS shall be reflected in an electronic report that consists of two parts:
 - CWBS Index
 - CWBS Dictionary



CWBS Index

OSD CAPE

- Includes complete WBS from approved contract CSDR plan
- Must indicate for each WBS element:
 - CWBS Code
 - CWBS Level
 - CWBS Element name
- Should also contain:
 - Program name
 - Contract number
 - Approved contract CSDR plan number
 - Date of content in dictionary
 - POC information for employee responsible for corrections (Name, Phone Number, Email)



CWBS Index

CWBS Element Level

Contract Work Breakdown Structure Index		Program: Vector Surface to Air Interceptor		RFP NO: XXXXX	Contract Plan No: A-07-X-C1	
				Contract No: DAAE07-XX-E-0001		
				DATE: 3/23/2007		
CWBS CODE	CWBS ELEMENT LEVEL					CWBS ELEMENT NAME
	1	2	3	4	5	
1.0	X					Vector Surface to Air Interceptor Missile System
1.1		X				Air Vehicle
1.1.1			X			Propulsion
1.1.2			X			Payload
1.1.3			X			Airframe
1.1.4			X			Reentry System
1.1.5			X			Post Boost System
1.1.6			X			Guidance and Control
1.1.6.1				X		Guidance Section
1.1.6.1.1					X	RF Active Seeker
1.1.6.1.2					X	IF Receiver
1.1.6.1.3					X	Digital Signal Processor
1.1.6.1.4					X	Integration, Assembly, Test and Checkout
1.1.6.2				X		Control Section
1.1.6.2.1					X	Tail Fin Control Section
1.1.6.2.2					X	Canards
1.1.6.2.3					X	Integration, Assembly, Test and Checkout
1.1.7			X			Ordnance Initiation Set
1.1.8			X			Airborne Test Equipment
1.1.9			X			Airborne Training Equipment
1.1.10			X			Auxiliary Equipment
1.1.11			X			Integration, Assembly, Test and Checkout
1.2		X				Command and Launch
1.2.1			X			Surveillance, Identification and Tracking Sensors
1.2.2			X			Launch and Guidance Control
1.2.3			X			Communications
1.2.4			X			Command and Launch Applications Software
1.2.5			X			Command and Launch System Software
1.2.6			X			Launcher Equipment

CWBS Code

CWBS Element Name

CWBS Code, Level, and Element Name must correspond exactly to WBS on approved contract CSDR plan



CWBS Dictionary

OSD CAPE

- A CWBS Dictionary is a living document that is developed and maintained by the contractor
- Key Characteristics
 - Lists and uniquely defines all WBS elements from the CSDR plan
 - Provides a complete definition of both technical and cost content for each WBS element
 - Revised throughout the program to reflect all statement of work changes
 - Submitted no more frequently than cost report submissions
 - The format provided in the DID is the preferred format, unless otherwise stated in contractor CDRLs
 - Current CWBS Dictionary DID: DI-MGMT-81334D



CWBS Dictionary Example

CWBS Element Name

Contract Work Breakdown Structure Index	Program: Vector Surface to Air Interceptor	RFP NO: XXXXX	Contract Plan No: A-07-X-C1
		Contract No: DAAE07-XX-E-0001	DATE: 3/23/2007

CWBS CODE	CWBS ELEMENT NAME	CWBS DEFINITION
1.0	Vector Surface to Air Interceptor Missile System	This WBS element includes the cost of the Vector missile All Up Round (AUR) in addition to the cost of the common WBS elements. The Vector missile is an Army Surface-to-Air interceptor missile providing 360 degree coverage for the air defense mission of forward deployed forces. It is a single-stage, short-range, low-to high-altitude theater missile defense system that utilizes advanced guidance and control technologies, including an advanced active RF seeker to extend the range of engagement beyond current and projected threats. This WBS element reports the total development cost of the AUR including the cost for the common WBS elements. WBS elements 1.1 Air Vehicle and 1.2 Command and Launch are the two child WBS elements that capture the cost of the product, while WBS elements 1.3 through 1.11 capture the cost of the "common elements".
1.1	Air Vehicle	This element refers to the means for delivering the destructive effect to the target, including the capability to generate or receive intelligence to navigate and penetrate to the target area and to detonate the warhead. This element includes the design, development, and production of complete units (prototype and operationally configured units that satisfy the requirement of their applicable specifications) regardless of their use. This WBS element has eleven children WBS elements. The government CWIPT has required, through the use of a CAIG-approved Plan for the Vector Missile, that WBS element 1.1.6 Guidance and Control will contain two child WBS elements, each one containing lower levels of WBS indenture in order to capture the costs of the specific cost driving elements within the G&C element.
1.1.1	Propulsion	This WBS element includes the cost of the Vector missile's rocket motor and labor required to integrate and assemble the propulsion system into the AUR. The propulsion system consists of the booster and the interstage. A single-stage, solid propellant rocket motor provides all of the boost impulse for the missile. The deployable flares and aft rate gyro package are positioned at the aft end of the booster in the BUG configuration. The single Thiokol TX-486-1 solid-fueled rocket motor is a subcontracted item, but the cost falls under the threshold for "direct reporting" by the supplier. This WBS element captures the cost of the purchased solid rocket motor and IAT&C costs necessary to install, test and check out the rocket motor inside the airframe. There is one TX-486-1 rocket motor per AUR.

CWBS Code

Technical and Cost Content Definition



CWBS Common Reporting Errors

OSD CAPE

- Failure to include CWBS index
- WBS does not match approved contract CSDR plan exactly
- Missing or incorrect contract and approved contract CSDR plan numbers
- Incomplete definitions (do not contain **both** technical and cost content)
- Lack of description in parent-level element definitions



CCDR Data Comparison

OSD CAPE

DD Form 1921

Displays all WBS elements

Nonrecurring and Recurring costs for all WBS elements

Contract Totals

G&A, Undistributed Budget, Management Reserve, Facilities Capital Cost of Money, and Profit/Fee

Units for all hardware elements

DD Form 1921-1

Select WBS elements reported

Nonrecurring and Recurring cost breakout

Detailed breakout of all resource data: Labor, material, and overhead dollars; labor hours

Reporting by all functions: Engineering, Tooling, Quality Control, and Manufacturing

DD Form 1921-2

Select WBS elements reported by Unit or Lot

Direct Recurring Costs to Date

Detailed breakout of direct costs

Reporting by all functions: Engineering, Tooling, Quality Control, and Manufacturing



Cost Data Summary Report (DD Form 1921)

OSD CAPE

- Key Characteristics
 - Contract Level report
 - Lists all WBS elements from the CSDR plan
 - Relates Contract WBS structure to Program WBS structure
 - Provides:
 - To Date and At Completion Nonrecurring and Recurring data
 - Indirect Costs (G&A, UB, MR, FCCM and Profit/Fee)
 - To Date and At Completion units for all hardware elements
 - Initial, Interim, and Final submissions due at pre-determined intervals according to approved plan
 - The DD Form 1921 is a standard form that cannot be altered by the contractor:
(<http://dcarc.pae.osd.mil/Policy/csdrReporting.aspx>)
 - Current 1921 DID: DI-FNCL-81565C



Cost Data Summary Report (DD Form 1921)

UNCLASSIFIED

OSD CAPE

WBS ELEMENT CODE A		WBS REPORTING ELEMENTS B		COSTS INCURRED TO DATE (thousands of U.S. Dollars)			COSTS INCURRED AT COMPLETION (thousands of U.S. Dollars)			
				NONRECURRING D	RECURRING E	TOTAL F	NONRECURRING H	RECURRING I	TOTAL J	
22. REMARKS										

Metadata

WBS Code and WBS Reporting Element (Columns A and B)

Remarks (Block 22)

At Completion: Units (Column G) and Costs Incurred (Columns H-J)

To Date: Units (Column C) and Costs Incurred (Columns D-F)

UNCLASSIFIED



1921 Common Reporting Errors

OSD CAPE

- Incorrect Metadata information
- WBS does not match approved contract CSDR plan exactly
- Parent element cost not equal to the sum of child element costs
- Sum of Nonrecurring and Recurring dollars not equal to Total reported dollars
- Units not provided for all hardware elements with Recurring Cost
- Failure to report equivalent full system units for parent level elements
- Failure to report G&A, FCCM, or Profit/Fee
- Contract Price not equal to Total Price
- Failure to provide comments in the Remarks section to explain anomalies (to date costs > EAC, negative costs, etc)



Functional Cost-Hour Report (DD Form 1921-1)

OSD CAPE

- Key Characteristics:
 - Submitted for specific WBS elements per the CSDR plan
 - Provides:
 - To Date and At Completion Nonrecurring and Recurring data
 - Breakout of costs into four Functional Categories
 - Breakout of costs into direct labor hours, direct labor dollars, and overhead
 - Price of direct-reporting subcontractors
 - Reported costs do not include summary element costs from 1921 (G&A, MR, UB, FCCM, Profit/Fee)
 - Initial, Interim, and Final submissions due at pre-determined intervals from the approved plan
 - Submitted as one file with separate tabs for each WBS element
 - The DD Form 1921-1 is a standard form that cannot be altered by the contractor: (<http://dcarc.pae.osd.mil/Policy/csdrReporting.aspx>)
 - Current 1921-1 DID: DI-FNCL-81566C



Functional Cost-Hour Report (DD Form 1921-1)

OSD CAPE

Metadata

Number of Units to Date and at Completion

Remarks

FUNCTIONAL DATA ELEMENTS		COSTS AND HOURS INCURRED TO DATE (thousands of U.S. Dollars or thousands of hours)			COSTS AND HOURS INCURRED AT COMPLETION (thousands of U.S. Dollars or thousands of hours)		
		A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
ENGINEERING							
(1) DIRECT ENGINEERING LABOR HOURS							
(2) DIRECT ENGINEERING LABOR DOLLARS							
(3) ENGINEERING OVERHEAD DOLLARS							
(4) TOTAL ENGINEERING DOLLARS							
MANUFACTURING OPERATIONS							
(5) DIRECT TOOLING LABOR HOURS							
(6) DIRECT TOOLING LABOR DOLLARS							
(7) DIRECT TOOLING & EQUIPMENT DOLLARS							
(8) DIRECT QUALITY CONTROL LABOR HOURS							
(9) DIRECT QUALITY CONTROL LABOR DOLLARS							
(10) DIRECT MANUFACTURING LABOR HOURS							
(11) DIRECT MANUFACTURING LABOR DOLLARS							
(12) MANUFACTURING OPERATIONS OVERHEAD DOLLARS (Including Tooling and Quality)							
(13) TOTAL MANUFACTURING OPERATIONS DOLLARS (Sum of rows 6, 7, 9, 11, and 12)							
MATERIALS							
(14) RAW MATERIAL DOLLARS							
(15) PURCHASED PARTS DOLLARS							
(16) PURCHASED EQUIPMENT DOLLARS							
(17) MATERIAL HANDLING OVERHEAD DOLLARS							
(18) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS							
(19) TOTAL MATERIAL DOLLARS							
OTHER COSTS							
(20) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)							
SUMMARY							
(21) TOTAL COST (Direct and Overhead)							
22. REMARKS							

Costs and Hours Incurred to Date

Costs and Hours Incurred at Completion



Functional Data Element Examples

OSD CAPE

Functional Data Element		Cost and Hours	
		Nonrecurring	Recurring
Engineering		<ul style="list-style-type: none"> • Study, analysis, design • Preparation of specifications, drawings, parts lists, and wiring diagrams • Determination and specification of requirements for reliability and maintainability 	<ul style="list-style-type: none"> • Sustaining engineering • Maintenance and updating of drawings and data • Continuous support of the fabrication, assembly, and test • Continuous support during delivery of contract end items
Manufacturing Operations	Tooling	<ul style="list-style-type: none"> • Design and development of basic tooling through its initial release • Includes jigs, dies, fixtures, molds, patterns, and special gauges replacement of basic tooling • Sometimes called Special Tools - their use is limited to the needs of the customer 	<ul style="list-style-type: none"> • Sustaining tooling that involves the maintenance, repair, modification, and/or restoration of a tool to its original condition
	Quality Control	<ul style="list-style-type: none"> • Planning of inspection methods 	<ul style="list-style-type: none"> • Check, physically inspect, measure, and test the product
	Manufacturing	<ul style="list-style-type: none"> • Initial setup and design of manufacturing environment and processes 	<ul style="list-style-type: none"> • Fabrication, assembly, and functional testing of a product or end item • Convert a raw material into finished items
Materials		<ul style="list-style-type: none"> • Direct costs for raw materials, purchased parts, purchased equipment, and direct-reporting subcontracts, as well as indirect costs for material handling/overhead 	
Other Costs		<ul style="list-style-type: none"> • Other direct costs, security, royalty 	



1921-1 Common Reporting Errors

OSD CAPE

- Incorrect Metadata information
- Incorrect WBS element codes and names
- Missing required WBS elements
- Nonrecurring and Recurring dollars not equaling the Total reported dollars
- Units and Costs not corresponding to Units and Costs reported on the 1921 report
- Failure to provide a comment in the Remarks section to explain report anomalies (to date costs > EAC, etc)
- Failure to include price of direct-reporting subcontractor effort on line 18 with an explanation in the Remarks section
- Reporting other costs not shown elsewhere on line 21 without corresponding explanation in Remarks section



Progress Curve Report (DD Form 1921-2)

OSD CAPE

- Key Characteristics:
 - Detailed resource data for select hardware reporting elements
 - Provides:
 - Direct Recurring Costs and Hours To Date, exclusive of Overhead
 - Breakout of Costs and Hours into four Functional Data Categories
 - Breakout of Costs and Hours by Unit or Lot
 - Price of Direct-Reporting Subcontractor effort
 - Key Characteristics (Weight, Speed, Power, etc) for each Unit/Lot
 - Used for modeling learning curves and projecting future units
 - Initial, Interim, and Final submissions due at pre-determined intervals from the approved plan
 - Submitted as one file with separate tabs for each WBS element
 - The DD Form 1921-2 can be altered by the contractor to accommodate additional Characteristics and Units/Lots: (<http://dcarc.pae.osd.mil/Policy/csdrReporting.aspx>)
 - Current 1921-2 DID: DI-FNCL-81567C



Progress Curve Report (DD Form 1921-2)

OSD CAPE

Metadata

SECURITY CLASSIFICATION Unclassified

PROGRESS CURVE REPORT

*Form Approved
OMB No. 0704-0188*

The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.**

1. MAJOR PROGRAM a. NAME: <input type="checkbox"/> Pre-A <input type="checkbox"/> B <input type="checkbox"/> C-FRP <input type="checkbox"/> A <input type="checkbox"/> C-LRP		2. PRIME MISSION PRODUCT	3. REPORTING ORGANIZATION TYPE <input type="checkbox"/> PRIME / ASSOCIATE CONTRACTOR <input type="checkbox"/> DIRECT-REPORTING SUBCONTRACTOR <input type="checkbox"/> GOVERNMENT		4. NAME/ADDRESS (Include ZIP Code) a. PERFORMING ORGANIZATION b. DIVISION	
5. APPROVED PLAN NUMBER	6. CUSTOMER (Direct-Reporting Subcontractor Use Only)		7. TYPE ACTION a. CONTRACT NO.: b. LATEST MODIFICATION		c. SOLICITATION NO.: d. NAME:	
8. PERIOD OF PERFORMANCE a. START DATE (YYYYMMDD): b. END DATE (YYYYMMDD):		9. REPORT CYCLE <input type="checkbox"/> INITIAL <input type="checkbox"/> INTERIM <input type="checkbox"/> FINAL	10. SUBMISSION NUMBER	11. RESUBMISSION NUMBER	12. REPORT AS OF (YYYYMMDD)	
3. NAME (Last, First, Middle Initial)		14. DEPARTMENT	15. TELEPHONE NO. (Include Area Code)	16. E-MAIL ADDRESS		
17. DATE PREPARED (YYYYMMDD)		8. WBS ELEMENT CODE		19. WBS REPORTING ELEMENT		
		20. UNITS/LOTS COMPLETED <input type="checkbox"/> UNIT TOTAL <input type="checkbox"/> LOT TOTAL		21. APPROPRIATION <input type="checkbox"/> RD&E <input type="checkbox"/> PROCUREMENT		

Completed Units/Lots
(Columns A1-An)

DATA ELEMENTS	A. COMPLETED UNITS/LOTS (thousands of U.S. Dollars or thousands of hours)				B. WORK IN PROCESS (WIP) (thousands of U.S. Dollars or thousands of hours)	C. TOTAL DIRECT COSTS AND HOURS INCURRED TO DATE (thousands of U.S. Dollars or thousands of hours)
	A1	A2	A3	A4		
(1) MODEL AND SERIES						
(2) FIRST UNIT						
(3) LAST UNIT						
(4) CONCURRENT UNITS/LOTS						
CHARACTERISTICS						
(5a) Weight						
(5b) Speed						
(5c) Power						
ENGINEERING (RECURRING ONLY)						
(6) DIRECT ENGINEERING LABOR HOURS						
(7) DIRECT ENGINEERING LABOR DOLLARS						
MANUFACTURING OPERATIONS (RECURRING ONLY)						
(8) DIRECT TOOLING LABOR HOURS						
(9) DIRECT TOOLING LABOR DOLLARS						
(10) DIRECT TOOLING & EQUIPMENT DOLLARS						
(11) DIRECT QUALITY CONTROL LABOR HOURS						
(12) DIRECT QUALITY CONTROL LABOR DOLLARS						
(13) DIRECT MANUFACTURING LABOR HOURS						
(14) DIRECT MANUFACTURING LABOR DOLLARS						
(15) TOTAL DIRECT MANUFACTURING OPERATIONS DOLLARS (Sum of rows 9, 10, 12, & 14)						
MATERIALS (RECURRING ONLY)						
(16) RAW MATERIALS DOLLARS						
(17) PURCHASED PARTS DOLLARS						
(18) PURCHASED EQUIPMENT DOLLARS						
(19) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS						
(20) TOTAL DIRECT MATERIAL DOLLARS						
OTHER COSTS (RECURRING ONLY)						
(21) OTHER DIRECT COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)						
SUMMARY (RECURRING ONLY)						
(22) TOTAL DIRECT COST						

**Completed Units + WIP = Total Costs Incurred to Date
(Sum of Columns A1 – An + Column B = Column C)**

Remarks
(Block 22)

22. REMARKS

Work In Process (Column B)

Total Direct Costs and Hours Incurred to Date (Column C)

1921-1 and 1921-2 Relationship

OSD CAPE



SECURITY CLASSIFICATION: **Unclassified**

FUNCTIONAL COST-HOUR REPORT Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. MAJOR PROGRAM a. NAME: b. PHASE/MILESTONE
 Pre-A B C-FRP C-LRIP O&S

2. PRIME MISSION PRODUCT
 PRIME / ASSOCIATE CONTRACTOR DIRECT-REPORTING SUBCONTRACTOR GOVERNMENT

3. REPORTING ORGANIZATION TYPE
 DIRECT-REPORTING SUBCONTRACTOR GOVERNMENT

4. NAME/ADDRESS (Include Zip Code)
 a. PERFORMING ORGANIZATION b. DIVISION

5. APPROVED PLAN NUMBER Form Approved OMB No. 0704-0188

6. CUSTOMER (Direct-Reporting Subcontractor Use Only)

7. TYPE ACTION
 a. CONTRACT NO.: c. SOLICITATION NO.: e. TASK ORDER/DELIVERY ORDER/LOT NO.:
 b. LATEST MODIFICATION: d. NAME:

8. PERIOD OF PERFORMANCE
 a. START DATE (YYYYMMDD):
 b. END DATE (YYYYMMDD):

9. REPORT CYCLE
 INITIAL INTERM FINAL

10. SUBMISSION NUMBER

11. RESUBMISSION NUMBER

12. REPORT AS OF (YYYYMMDD)

13. NAME (Last, First, Middle Initial)

14. DEPARTMENT

15. TELEPHONE NO. (Include Area Code)

16. EMAIL ADDRESS

17. DATE PREPARED (YYYYMMDD)

18. WBS ELEMENT CODE

19. WBS REPORTING ELEMENT

20. NUMBER OF UNITS
 a. TO DATE b. AT COMPLETION

21. APPROPRIATION
 RDT&E PROCUREMENT O&M

FUNCTIONAL DATA ELEMENTS

FUNCTIONAL DATA ELEMENTS	COSTS AND HOURS INCURRED TO DATE (thousands of U.S. Dollars or thousands of hours)			COSTS AND HOURS INCURRED AT COMPLETION (thousands of U.S. Dollars or thousands of hours)		
	A. NONRECURRING	B. RECURRING	C. TOTAL	D. NONRECURRING	E. RECURRING	F. TOTAL
ENGINEERING						
(1) DIRECT ENGINEERING LABOR HOURS						
(2) DIRECT ENGINEERING LABOR DOLLARS						
(3) ENGINEERING OVERHEAD DOLLARS						
(4) TOTAL ENGINEERING DOLLARS						
MANUFACTURING OPERATIONS						
(5) DIRECT TOOLING LABOR HOURS						
(6) DIRECT TOOLING LABOR DOLLARS						
(7) DIRECT TOOLING & EQUIPMENT DOLLARS						
(8) DIRECT QUALITY CONTROL LABOR HOURS						
(9) DIRECT QUALITY CONTROL LABOR DOLLARS						
(10) DIRECT MANUFACTURING LABOR HOURS						
(11) DIRECT MANUFACTURING LABOR DOLLARS						
(12) MANUFACTURING OPERATIONS OVERHEAD DOLLARS (Including Tooling and Quality)						
(13) TOTAL MANUFACTURING OPERATIONS DOLLARS (Sum of rows 6, 7, 9, 11, and 12)						
MATERIALS						
(14) RAW MATERIAL DOLLARS						
(15) PURCHASED PARTS DOLLARS						
(16) PURCHASED EQUIPMENT DOLLARS						
(17) MATERIAL HANDLING OVERHEAD DOLLARS						
(18) TOTAL DIRECT-REPORTING SUBCONTRACTOR DOLLARS						
(19) TOTAL MATERIAL DOLLARS						
OTHER COSTS						
(20) OTHER COSTS NOT SHOWN ELSEWHERE (Specify in Remarks)						
SUMMARY						
(21) TOTAL COST (Direct and Overhead)						

22. R...
 DD F...
 SECURITY CLASSIFICATION: **Unclassified**

Form Approved OMB No. 0704-0188

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

4. NAME/ADDRESS (Include Zip Code)
 a. PERFORMING ORGANIZATION b. DIVISION

NO.: e. TASK ORDER/DELIVERY ORDER/LOT NO.:

11. RESUBMISSION NUMBER

12. REPORT AS OF (YYYYMMDD)

16. E-MAIL ADDRESS

17. DATE PREPARED (YYYYMMDD)

21. APPROPRIATION
 RDT&E PROCUREMENT O&M

B. WORK IN PROCESS (WIP)
 (thousands of U.S. Dollars or thousands of hours)

C. TOTAL DIRECT COSTS AND HOURS INCURRED TO DATE
 (thousands of U.S. Dollars or thousands of hours)

Direct Costs and Hours Incurred to Date from Column B of the 1921-1 report correspond to Column C of the 1921-2 report for each respective WBS element



1921-2 Common Reporting Errors

OSD CAPE

- Incorrect Metadata information
- Incorrect WBS element codes and names
- Missing WBS elements
- Missing Units and Key Characteristics
- Failure to break out costs by Unit/Lot
- Completed Unit/Lot plus Work in Progress dollars not matching the Total dollars reported (Column A + Column B should equal Column C)
- Costs not matching the Recurring costs from the corresponding 1921-1 for each WBS element
- First Unit and Last Unit not corresponding to number of units from 1921 and 1921-1
- Failure to provide a comment in the Remarks section to explain report anomalies (to date costs > EAC, etc)



Contractor Business Data Report (DD Form 1921-3)

OSD CAPE

- Annual report designed to facilitate overhead cost analysis at a specific contractor's site
- Includes specific overhead information on all MDAP Program government contracts plus other government and commercial business
 - Actual direct and indirect cost data on Government contracts
 - Proposed direct and indirect cost data for future fiscal years
- The DD Form 1921-3 cannot be altered by the contractor:
(<http://dcarc.pae.osd.mil/Policy/csdrReporting.aspx>)
- Current 1921-3 DID: DI-FNCL-81765B



1921-3 Implementation

OSD CAPE

- All new contracts issued after April 2, 2009 contain DD 1921-3 requirement in Block 13 of the CSDR plan, with requirement described in Block 15
- FPR data cannot be submitted in lieu of the 1921-3 report
- Must be submitted in Microsoft Excel format, with data for prior, current, and future years in one workbook

1921-3 Submission Requirement

OSD CAPE

- Required on all contracts and subcontracts with CSDR requirements
- Indicated in Blocks 13 and 15 of the approved contract CSDR plan
- One report submittal *per FPR unit per fiscal year*



DD Form 1921-3 Page One

OSD CAPE

SECURITY CLASSIFICATION

CONTRACTOR BUSINESS DATA REPORT

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate, Information Management Division, 1155 Defense Pentagon, Washington, DC 20301-1155 (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.**

Metadata

1. CONTRACTOR NAME/ADDRESS (Include Zip Code)	2. FPR UNIT	3. IMPLEMENTING CONTRACT NUMBER	4. DATA PERIOD (X one) Prior Year Current Year Future Year	5. FISCAL YEAR (YYYY)	6. DATES IN FISCAL YEAR (YYYYMMDD) Start Date: End Date:
7. PREPARER'S NAME (Last, First, Middle Initial)	8. DEPARTMENT	9. TELEPHONE NO. (Include Area Code)	10. EMAIL ADDRESS	11. DATE PREPARED (YYYYMMDD)	

Overhead Accumulation, Distribution, and Application

Direct Cost by Program

S E C T I O N	DIRECT COST BY PROGRAM					DIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)										
	Program Name a	A/F	Contract Number b	Equivalent Units c	Buyer d	Engineering			Manufacturing Operations			Materials	Other			
						Workers e	Dollars f	Hours g	Workers h	Dollars i	Hours j	Dollars k	Workers l	Dollars m	Hours n	
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																
11.	Other DoD Effort															
12.	Other Government Effort															
13.	Commercial Effort															
14.	Total Direct Cost and Hours Base						\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0	
15.	Total Direct Workers															

Indirect Cost Categories

S E C T I O N	INDIRECT COST CATEGORY	INDIRECT: COST / HOURS / MANPOWER (Report dollars and hours in thousands)														
		Engineering			Manufacturing Operations			Materials	Other			G&A				
		Workers o	Dollars p	Hours q	Workers r	Dollars s	Hours t	Dollars u	Workers v	Dollars w	Hours x	Dollars y	Hours z			
15.	Indirect Labor															
16.	Employee Benefits															
17.	Payroll Taxes															
18.	Employment															
19.	Communication/Travel															
20.	Production Related															
21.	Facilities-Building/Land															
22.	Facilities-Furniture/Equipment															
23.	Administration															
24.	Future Business															
25.	Other Miscellaneous															
26.	Credits															
27.	Total Indirect Cost and Hours		\$0.0	0.0		\$0.0	0.0	\$0.0		\$0.0	0.0		\$0.0	0.0		
28.	Total G&A Cost and Hours														\$0.0	0.0
29.	Indirect/Direct Cost Rate		0.00%			0.00%		0.00%		0.00%			0.00%			
30.	G&A Rate/(Direct + Indirect)														0.00%	

DD FORM 1921-3, MAY 2011

SECURITY CLASSIFICATION

Page 1 of 2



DD Form 1921-3 Page Two

OSD CAPE

SECURITY CLASSIFICATION _____

CONTRACTOR BUSINESS DATA REPORT - PAGE 2

SECTION C	PRODUCTION CAPACITY		Current Year		Method of Calculating "FPR unit % of Full Production Capacity"															
	FPR Unit % of Full Production Capacity																			
	Number of Shifts																			
SECTION D	Current Year (Report hours in thousands)																			
	1st Quarter				2nd Quarter				3rd Quarter				4th Quarter				Prior Year	Year	Year	
	Workers		Hours	Basic Rate	Effective Rate	Workers		Hours	Basic Rate	Effective Rate	Workers		Hours	Basic Rate	Effective Rate	Workers		Hours	Basic Rate	Effective Rate
	a		b	c	d	a		b	c	d	a		b	c	d	a		b	c	d
	1. Engineering - Direct Labor																			
	2. Manufacturing Operations - Direct Labor																			
a. Tooling - Direct Labor																				
b. Quality Control - Direct Labor																				
c. Manufacturing - Direct Labor																				
SECTION E	Prior Year		Current Year																	
	Total FPR Unit Revenue (Sales)																			
SECTION F	Organizational Changes (For Each Year Reported)									Accounting Changes (For Each Year Reported)										
REMARKS																				

Facility-wide Specifics

Direct Labor Rates

Total Sales

Organizational & Accounting Changes

Remarks



1921-3 Common Reporting Errors

OSD CAPE

- Page 1 (Sections A and B) not submitted for prior year, current year, and at least three future years.
- Remarks
 - Failure to provide details on the composition when :
 - Costs or hours in Section A, Lines 11 (Other DoD Effort), 12 (Other Government Effort), 13 (Commercial Effort) is are greater than or equal to 15% of the costs or hours in Lines 14 (Total Direct Cost and Hours Base)
 - Costs or hours in Line 25 (Other Miscellaneous) are greater than or equal to 15% of the cost and hour totals in Lines 27 (Total Indirect Cost and Hours) or 28 (Total G&A Cost and Hours)
 - The “Other” category (Section A, Columns l, m, n) is used
 - Overtime premiums or employee benefits are reported in Section B (Indirect Cost Categories)
 - Failure to explain methodology for determining equivalent units
- Costs, hours and workers not summing correctly in “Total” lines



CSDR Validation

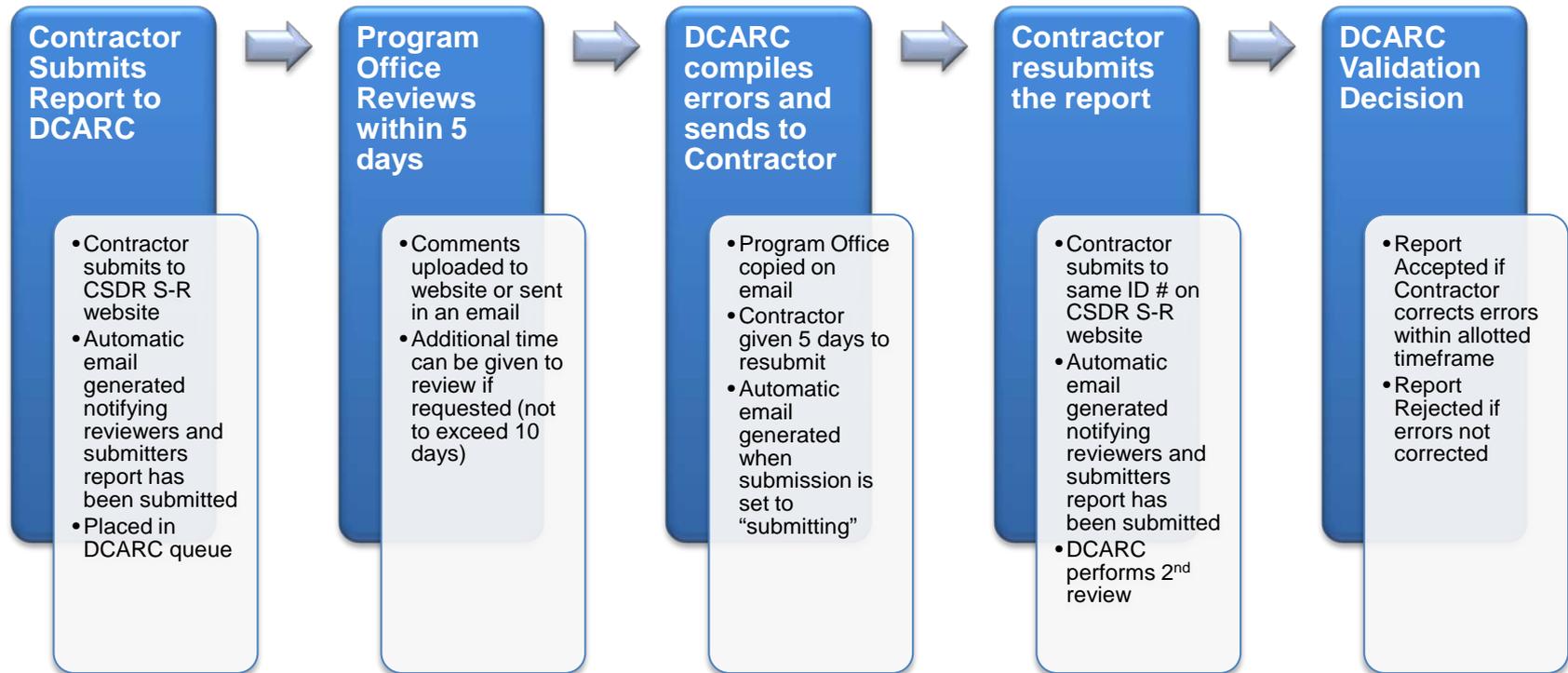
OSD CAPE





Validation Process

OSD CAPE



DCARC Validation process should be complete within 20 business days of contractor submission



DCARC Validation Process

OSD CAPE

Manual Checks

- Security Classification
- CCDR metadata vs. Contract Plan
- Inclusion of all WBS Elements and Summary Elements
- Costs reported for G&A and FCCM
- Units reported for “To Date” and “At Completion” for all hardware elements
- Contract Price vs. Total Price
- Appropriate and Accurate Comments in Remarks Section
- Costs and Quantities match between 1921, 1921-1, and 1921-2

Math Checks

- Use cPet validation tool on CSDR S-R website (“Validation” tab)
- Costs and Quantities match between 1921 and 1921-1
- Sum of Children elements = Parent element
- Nonrecurring + Recurring Figures = Total Figures
- Direct Labor Hours, Dollars and OH reported together
- To date costs \leq At Completion Costs
- Summary Elements sum to Total Price
- Costs within Functional Categories on 1921-1 sum to Total



Program Office Validation Process

OSD CAPE

- The Program Office should perform the following checks as the DCARC does not have insight into all programmatic information:
 - Correct units reported for all hardware elements
 - Correct “To Date” and “At Completion” total figures
 - Accurate comments in Remarks section
 - Costs reported for all necessary WBS elements (use approved plan and CWBS dictionary as reference)
 - Accurate costs reported in WBS elements
 - Product characteristics and manufacturing functional breakdown validation
 - Correct variant reporting



Communication

OSD CAPE

- Program Office Reviewers must communicate to DCARC if they plan on reviewing a report and when DCARC can expect feedback
- Feedback can be sent to DCARC through the CSDR S-R website
- Feedback should be provided in a format that can be understood by DCARC and communicated to the contractor
- If feedback cannot be provided within 10 days, DCARC will begin its review



Validation Error Report

OSD CAPE

- After reviewing CCDRs, DCARC analysts compile a Validation Error Report to send to Contractors and Program Office
- Three categories:
 - I. Major Errors Resulting in Rejection
 - II. Minor Errors that must be corrected in future submissions (including resubmissions)
 - III. Observations
 - Observations could lead to an audit by DCAA/DCMA

Attributes of a Successful Submission

OSD CAPE

1921 Report

- Single file for 1921 report (.xls)
- Contract ceiling \geq contract price and/or total price
- Contract number and plan number matches plan
- All WBS elements included from plan
- Units reported for all hardware elements
- Sum of children element costs equal to parent element cost
- Nonrecurring Costs + Recurring Costs = Total Cost
- Costs reported for G&A, FCCM, and Profit

1921-1 Report

- Single file for 1921-1 report with separate tabs for each WBS reporting element requiring 1921-1 reporting (.xls)
- Units and costs on 1921-1 match 1921
- Nonrecurring Costs + Recurring Costs = Total Cost
- Direct labor hours, dollars, and overhead reported together

1921-2 Report

- Single file for 1921-2 report with separate tabs for each WBS reporting element requiring 1921-2 reporting (.xls)
- Costs on 1921-2 (Column C) match corresponding costs on 1921-1 (Column B)
- Completed Units + Work in Process = Total Cost

Deviation from these standard requirements could lead to major errors resulting in rejection



Accepted and Rejected Reports

OSD CAPE

Accepted

- Acceptance Memo sent out
- If minor errors exist, Validation Error Report sent with Acceptance Memo (errors must be addressed in next submission)

DACIMS

Rejected

- Reject Memo and Validation Error Report sent out
- Increment resubmission number (e.g., from "0" to "1")

**Contractor
must
resubmit
report in 30
days**



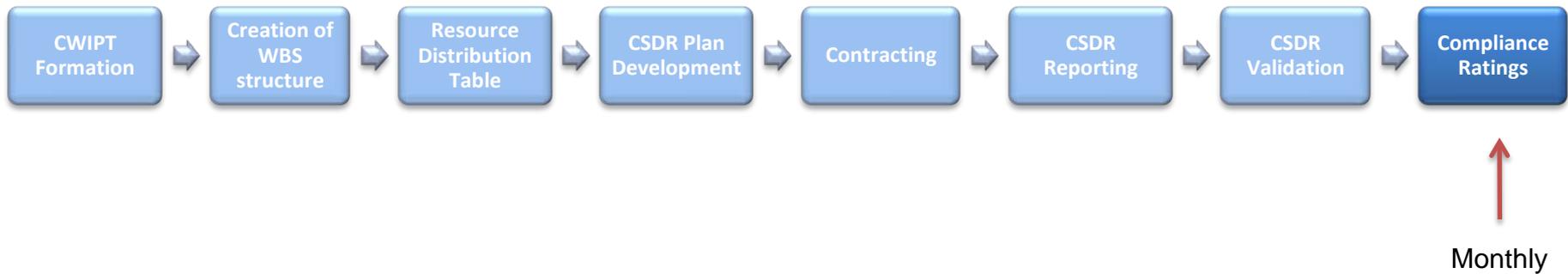
Consequences of Rejected Reports

OSD CAPE

- Additional work for government and reporting contractor
- Rejection taken into account when compiling compliance ratings
- Delayed milestone reviews and contract awards
- Delayed cost data availability for government cost analysts

Compliance Ratings

OSD CAPE





Compliance Ratings

OSD CAPE

- Rated and reported to DDCA monthly
- Compiled quarterly as DAES assessments
- Based on DCARC internal tracking checklists
- Used to inform DoD Senior Leadership of the performance of the CSDR Reporting System and contractual CSDR Requirements



Compliance Ratings

OSD CAPE

CSDR Plans and Documentation

- Green: Full compliance
- Green Advisory: Failure to submit an RDT with the CSDR plan
- Yellow: Failure to submit RFP SOW language
- Yellow Advisory: Failure to create plans and submit documentation
- Red: One or more contracts awarded without CSDR requirements

Contracting

- Green: Full Compliance
- Green Advisory: Failure to submit CDRLs within 30 days of award
- Yellow: Failure to hold Post Award Conference
- Yellow Advisory: Release of an RFP without an approved CSDR plan
- Any open CSDR contract issues within one month prior to DAB may result in DAB being delayed

Cost Reporting

- Green: Full Compliance
- Green Advisory: Less than three outstanding CSDR submissions/rejected reports
- Yellow: Less than six outstanding CSDR submissions/rejected reports
- Yellow Advisory: Greater than six outstanding CSDR submissions/rejected reports
- Any delinquent CSDR submissions within one month prior to DAB may result in DAB being delayed

Defense Cost and Resource Center

DCAA CSDR Audit UPDATE

Linnay Franklin



30 November 2011

OSD CAPE

Cost Assessment and Program Evaluation



DCARC CSDR Audit Requests

OSD CAPE

- *Objective:*
 - Checking the accountability of the math in the CSDR reports vs contractor's accounting system
 - Making sure contractors are following the DIDs and proper procedures



CSDR Audit Results

OSD CAPE

- CCDR policies and procedures inadequate
- Deficiencies are significant that DCAA suggests contractor should correct/resubmit final CCDRs
- Accounting system not adequate to report results on the 1921s or by contract. Costs/hours incurred to date are not based on actual costs/hours and are not traceable; contractor not compliant w/ DID requirements.
- Understatement of number of units to date and number of units at completion in the DD Form 1921.

CSDR Submissions



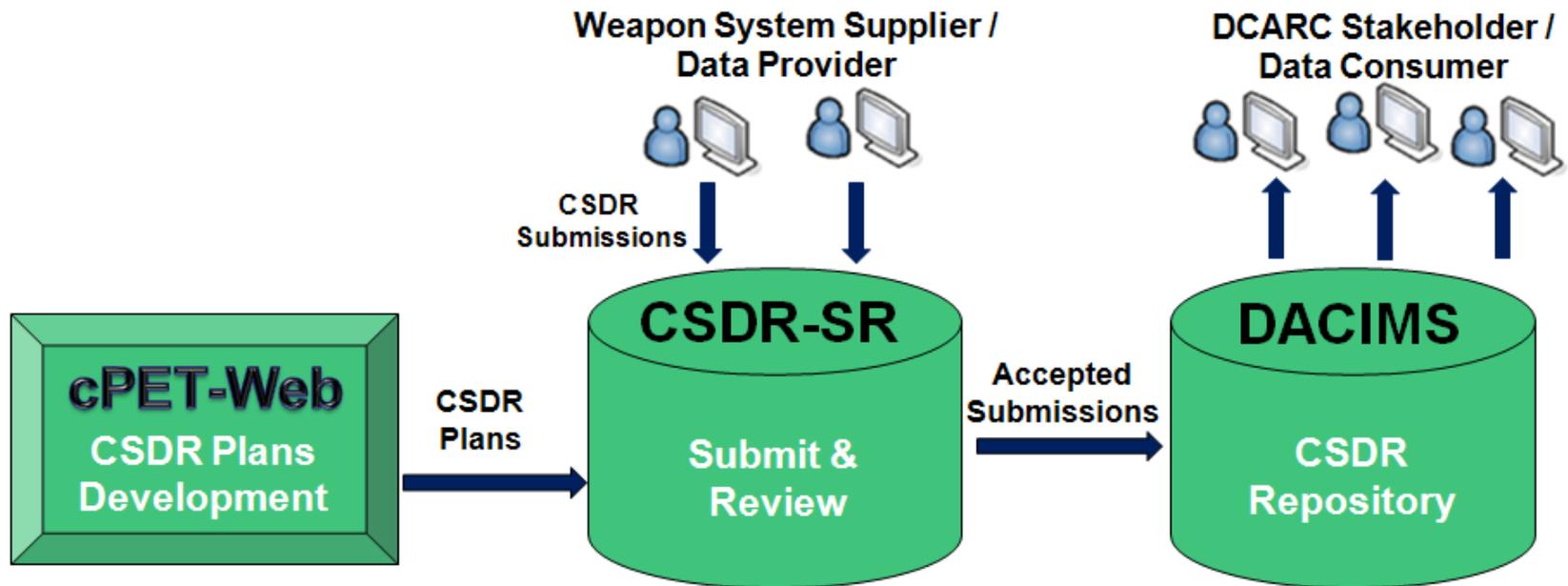


CSDR Systems Overview

OSD CAPE

- Key DCARC IT Systems Supporting CSDR Functions

- cPET (Web): Preparing CSDR Plans, RDT, Validations
- – cPET (Desktop): Preparing CSDR submissions, pre-validation
- CSDR-SR: Manages CSDR Submission and Review Business Functions
- DACIMS: CSDR Repository Supporting Cost Estimating Functions



Core CSDR IT Systems



Preparing Submission Packages

OSD CAPE

- cPET (Desktop and Web) Can Create 1921/1921-1 Files From Excel Flat-File **Header** **1921** **1921-1**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	1921/1921-1 Input		WBS Reporting Level	WBS Code	WBS Reporting Elements	Units TD	NR \$ TD	Rec \$ TD	Units AC	NR \$ AC	Rec \$ AC	NR Eng H	Rec Eng H	NR Eng F	Rec Eng F	NR Direct
1	Data Type	1921/1921-1 Input		1.0	Space System	0	419000	49200	1	2819000	140700	2000	1000	3000	4000	100000
2	Data Version	2007		1.1	SEIT/PM and Other Commc	0	25000	25000	1	125000	29000	500	200	600	300	600
3	Security Classification	Unclassified		1.2	Space Vehicle (1.....n as requ	0	229000	13200	1	1329000	57200	600	300	700	400	39000
4	1a Program MDAP	cPet Demonstration Space System (CDSS)		1.2.1	SEIT/PM and Other Commc	0	24000	5000	1	124000	9000					
5	1b Program Phase	Development		1.2.2	Spacecraft Bus	0	22000	2500	1	222000	10500					
6	2 Prime Mission Product	Demo PMP		1.2.2.1	Integration, Assembly, Test	0	12000	2000	1	112000	6000					
7	3 Contractor Type	Prime/Associate		1.2.2.2	Telemetry, Tracking, and C	0	10000	500	1	110000	4500					
8	4 Name	Demo Corporation, 456 Test Blvd, New York, NY,		1.2.3	Communication / Payload	0	24000	0	1	424000	16000					
9	4 Address Line 1			1.2.3.1	Communication	0	17000	0	1	217000	8000					
10	4 Address Line 2			1.2.3.1.1	UHF Antenna Subsystem	0	8000	0	1	108000	4000					
11	4 Address City			1.2.3.1.2	KA Antenna Subsystem	0	9000	0	1	109000	4000					
12	4 Address State			1.2.3.2	Payload	0	7000	0	1	207000	8000					
13	4 Address Zip			1.2.3.2.1	Legacy Subsystem	0	3000	0	1	103000	4000					
14	5 Approved Plan Number	X-08-Y-C1		1.2.3.2.2	KA to UHF Subsystem	0	4000	0	1	104000	4000					
15	6 Customer			1.2.4	Booster Adapter	0	5000	200	1	105000	4200					
16	7 Contract Type			1.2.5	Space Vehicle Storage	0	4000	500	1	104000	4500					
17	8 Contract Price	3219200		1.2.6	Launch Systems Integration	0	50000	2000	1	150000	6000					
18	9 Contract Ceiling	N/A		1.2.7	Launch Operations & Missic	0	100000	3000	1	200000	7000					
19	10a Contract No	A99XYZ-08-B-1234		1.3	Ground (1.....n as required)	0	128000	7000	1	1128000	47000					
20	10b Latest Modification			1.3.1	SEIT/PM and Other Commc	0	20000	2000	1	120000	6000					
21	10c Solicitation No			1.3.2	Ground Terminal Subsystem	0	13000	0	1	113000	4000					
22	10d Name	Demo		1.3.3	Command and Control Subsy	0	14000	0	1	114000	4000					
23	11a PoP Start Date	20080513		1.3.4	Mission Management Subsys	0	18000	0	1	118000	4000					
24	11b PoP End Date	20100131		1.3.5	Data Archive/Storage Subsys	0	9000	0	1	109000	4000					
25	12 Appropriation	Procurement		1.3.6	Mission Data Processing Sub	0	10000	1000	1	110000	5000					
26	13 Report Cycle	Interim		1.3.7	Mission Data Analysis and P	0	8000	500	1	108000	4500					
27	14 Submission Number	1		1.3.8	Mission Infrastructure Subsy	0	12000	500	1	112000	4500					
28	15 Resubmission Number	0		1.3.9	Collection Management Sub	0	4000	1000	1	104000	5000					
29	16 Report As Of	20081031		1.3.10	Satellite Control Subsystem	0	20000	2000	1	120000	6000					
30	17 Name	Tester, Fred A		1.4	Launch Vehicle	0	15000	3000	1	115000	7000					
31	18 Department	Business Operations		1.5	User Equipment	0	22000	1000	1	122000	500					
32	19 Telephone Number	555-555-5555														
33	20 Email Address	cPetUser@demo.local														
34	21 Date Prepared	20081201														
35	Subtotal TD		468200													
36	Subtotal AC		2959700													
37	G&A TD		54000													
38	G&A AC		158000													
39	UB AC		0													
40	MR AC		0													
41	FCCM TD		1500													
42	FCCM AC		101500													
43	Fee TD		0													
44	Fee AC		0													
45	Price TD		523700													
46	Price AC		3219200													
47	DD 1921 Remarks															

Preparing Submission Packages

OSD CAPE

- cPET (Desktop and Web) Can Create 1921/1921-1 Files From Excel

The screenshot displays the CSDR Planning & Execution Tool interface. The main window shows a document tree with a selected item '1921 from Demo Corporation, 456 Test Blvd, New York, NY, 55555 for cPet Demonstration Space System (CDSS)'. A red callout box highlights the 'Import [a]t File...' option in the 'Import' menu. A smaller window in the foreground shows a detailed table of WBS Element Codes and their associated costs and units.

WBS Element Code	Reporting Element	# of Units	To Date			# of Units
			Nonrecurring	Recurring	Total	
1.0	Space System	0	419,000.0	49,200.0	468,200.0	1
1.1	SEIT/PM and Other Co...	0	25,000.0	25,000.0	50,000.0	1
1.2	Space Vehicle (1...n as...	0	229,000.0	13,200.0	242,200.0	1
1.2.1	SEIT/PM and Other Co...	0	24,000.0	5,000.0	29,000.0	1
1.2.2	Spacecraft Bus	0	22,000.0	2,500.0	24,500.0	1
1.2.2.1	Integration, Assembly...	0	12,000.0	2,000.0	14,000.0	1
1.2.2.2	Telemetry, Tracking, an...	0	10,000.0	500.0	10,500.0	1
1.2.3	Communication / Paylo...	0	24,000.0	0.0	24,000.0	1
1.2.3.1	Communication	0	17,000.0	0.0	17,000.0	1
1.2.3.1.1	UHF Antenna Subsystem...	0	8,000.0	0.0	8,000.0	1
1.2.3.1.2	KA Antenna Subsystem	0	9,000.0	0.0	9,000.0	1
1.2.3.2	Payload	0	7,000.0	0.0	7,000.0	1
1.2.3.2.1	Legacy Subsystem	0	3,000.0	0.0	3,000.0	1
1.2.3.2.2	KA to UHF Subsystem	0	4,000.0	0.0	4,000.0	1
1.2.4	Booster Adapter	0	5,000.0	200.0	5,200.0	1
1.2.5	Space Vehicle Storage	0	4,000.0	500.0	4,500.0	1
1.2.6	Launch Systems Integr...	0	50,000.0	2,000.0	52,000.0	1
1.2.7	Launch Operations & M...	0	100,000.0	3,000.0	103,000.0	1
1.3	Ground (1...n as require...	0	128,000.0	7,000.0	135,000.0	1
1.3.1	SEIT/PM and Other Co...	0	20,000.0	2,000.0	22,000.0	1
1.3.2	Ground Terminal Subs...	0	13,000.0	0.0	13,000.0	1

Preparing Submission Packages

- cPET (Desktop and Web) Can Create Draft 1921/1921-1 Forms

CSDR Planning & Execution Tool

Document: Program Plan for cPet Demonstration Space System (CDSS) Info: Approved Plan #X-08-Y

Contract Plan with The Boeing Company for cPet Demonstration Space System (Contract #A98X12-08-B-1234) Approved Plan #X-08-Y-C1

Contract Plan with TBD for cPet Demonstration Space System (Contract #A98X12-08-B-1234) Approved Plan #X-08-Y-C1

1921 from Demo Corporation, 456 Test Blvd

1921-1 from Demo Corporation, 456 Test Blvd

COST DATA SUMMARY REPORT

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 9 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION

1. PROGRAM		2. PRIME MISSION PRODUCT		3. CONTRACTOR TYPE (X-one)		4. NAME/ADDRESS (Include ZIP Code)		5. APPROVED PLAN NUMBER	
a. MDAP: cPet Demonstration Space System (CDSS) b. PHASE: Development		Demo PMP		<input checked="" type="checkbox"/> PRIME / ASSOCIATE <input type="checkbox"/> DIRECT REPORTING SUBCONTRACTOR		Demo Corporation, 456 Test Blvd, New York, NY, 55555		X-08-Y-C1	
6. CUSTOMER (DIRECT-REPORTING SUBCONTRACTOR USE ONLY)		7. CONTRACT		8. CONTRACT PRICE		9. CONTRACT NO.		10. SOLICITATION NO.	
		\$3,219,200.00		N/A		A98X12-08-B-1234		Demo	
11. PERIOD OF PERFORMANCE		12. APPROPRIATION		13. REPORT CYCLE		14. SUBMISSION NUMBER		15. RESUBMISSION NUMBER	
a. START DATE (YYYYMMDD): 20080513 b. END DATE (YYYYMMDD): 20100101		<input type="checkbox"/> PROTE <input checked="" type="checkbox"/> PROCUREMENT <input type="checkbox"/> O&M		<input type="checkbox"/> INITIAL <input checked="" type="checkbox"/> INTERIM <input type="checkbox"/> FINAL		1		0	
17. NAME (Last, First, Middle Initial)		18. DEPARTMENT		19. TELEPHONE NUMBER (Include Area Code)		20. EMAIL ADDRESS		21. DATE PREPARED (YYYYMMDD)	
Tester, Fred A		Business Operations		555-555-5555		cPetUsers@demo.local		20081201	

VBS ELEMENT CODE	VBS REPORTING ELEMENTS	NUMBER OF UNITS TO DATE	COSTS INCURRED TO DATE			NUMBER OF UNITS AT COMPLETION	COSTS INCURRED AT COMPLETION		
			NONRECURRING	RECURRING	TOTAL		NONRECURRING	RECURRING	TOTAL
10	Space System	0.0	\$419,000.00	\$49,200.00	\$468,200.00	10	\$239,000.00	\$140,700.00	\$379,700.00
11	SEIT/PM and Other Common Elements	0.0	\$25,000.00	\$25,000.00	\$50,000.00	10	\$125,000.00	\$25,000.00	\$150,000.00
12	Space Vehicle (L.n as required)	0.0	\$223,000.00	\$13,200.00	\$242,200.00	10	\$1,328,000.00	\$1,388,200.00	\$1,388,200.00
12.1	SEIT/PM and Other Common Elements	0.0	\$24,000.00	\$5,000.00	\$29,000.00	10	\$124,000.00	\$3,000.00	\$133,000.00
12.2	Spacecraft Bus	0.0	\$22,000.00	\$2,500.00	\$24,500.00	10	\$222,000.00	\$24,500.00	\$222,500.00
12.2.1	Integration, Assembly, Test and Checkout	0.0	\$12,000.00	\$2,000.00	\$14,000.00	10	\$15,000.00	\$5,000.00	\$19,000.00
12.2.2	Telemetry, Tracking, and Command Subsystem	0.0	\$10,000.00	\$500.00	\$10,500.00	10	\$10,000.00	\$4,500.00	\$14,500.00
12.3	Communication / Payload	0.0	\$24,000.00	\$0.00	\$24,000.00	10	\$18,000.00	\$16,000.00	\$440,000.00
12.3.1	Communication	0.0	\$17,000.00	\$0.00	\$17,000.00	10	\$27,000.00	\$5,000.00	\$225,000.00
12.3.1.1	UHF Antenna Subsystem	0.0	\$9,000.00	\$0.00	\$9,000.00	10	\$16,000.00	\$4,000.00	\$12,000.00
12.3.1.2	KA Antenna Subsystem	0.0	\$5,000.00	\$0.00	\$5,000.00	10	\$10,000.00	\$4,000.00	\$103,000.00
12.3.2	Payload	0.0	\$7,000.00	\$0.00	\$7,000.00	10	\$207,000.00	\$18,000.00	\$215,000.00
12.3.2.1	Legacy Subsystem	0.0	\$3,000.00	\$0.00	\$3,000.00	10	\$10,000.00	\$4,000.00	\$97,000.00
12.3.2.2	KA to UHF Subsystem	0.0	\$4,000.00	\$0.00	\$4,000.00	10	\$19,000.00	\$4,000.00	\$105,000.00
12.4	Booster Adapter	0.0	\$5,000.00	\$200.00	\$5,200.00	10	\$105,000.00	\$4,200.00	\$109,200.00
12.5	Space Vehicle Storage	0.0	\$4,000.00	\$0.00	\$4,000.00	10	\$104,000.00	\$4,500.00	\$108,500.00
12.6	Launch Systems Integration	0.0	\$50,000.00	\$2,000.00	\$52,000.00	10	\$150,000.00	\$5,000.00	\$156,000.00
12.7	Launch Operations & Mission Support	0.0	\$100,000.00	\$0.00	\$100,000.00	10	\$200,000.00	\$7,000.00	\$207,000.00
13	Ground (L.n as required)	0.0	\$128,000.00	\$7,000.00	\$135,000.00	10	\$1,128,000.00	\$147,000.00	\$1,175,000.00
13.1	SEIT/PM and Other Common Elements	0.0	\$20,000.00	\$2,000.00	\$22,000.00	10	\$120,000.00	\$5,000.00	\$128,000.00
13.2	Ground Terminal Subsystems	0.0	\$13,000.00	\$0.00	\$13,000.00	10	\$110,000.00	\$4,000.00	\$117,000.00
13.3	Command and Control Subsystem	0.0	\$14,000.00	\$0.00	\$14,000.00	10	\$14,000.00	\$0.00	\$19,000.00
13.4	Mission Management Subsystem	0.0	\$15,000.00	\$0.00	\$15,000.00	10	\$18,000.00	\$4,000.00	\$123,000.00
13.5	Data Archive/Storage Subsystem	0.0	\$9,000.00	\$0.00	\$9,000.00	10	\$108,000.00	\$4,000.00	\$113,000.00
13.6	Mission Data Processing Subsystem	0.0	\$30,000.00	\$10,000.00	\$40,000.00	10	\$110,000.00	\$5,000.00	\$115,000.00
13.7	Mission Data Analysis and Dissemination Subsystem	0.0	\$9,000.00	\$0.00	\$9,000.00	10	\$105,000.00	\$5,000.00	\$112,500.00
13.8	Mission Infrastructure Subsystem	0.0	\$12,000.00	\$500.00	\$12,500.00	10	\$112,000.00	\$4,500.00	\$116,500.00
13.9	Collection Management Subsystem	0.0	\$4,000.00	\$1,000.00	\$5,000.00	10	\$104,000.00	\$5,000.00	\$109,000.00
13.10	Satellite Control Subsystem	0.0	\$20,000.00	\$3,000.00	\$23,000.00	10	\$110,000.00	\$5,000.00	\$126,000.00
14	Launch Vehicle	0.0	\$15,000.00	\$3,000.00	\$18,000.00	10	\$115,000.00	\$7,000.00	\$122,000.00
15	User Equipment	0.0	\$22,000.00	\$1,000.00	\$23,000.00	10	\$122,000.00	\$500.00	\$122,500.00
Subtotal Cost							\$468,200.00		\$2,958,700.00
Reporting Contractor G&A							\$54,000.00		\$158,000.00
Reporting Contractor Undistributed Budget									\$0.00
Reporting Contractor Management Reserve									\$0.00
Reporting Contractor FCCM							\$1,500.00		\$101,500.00
Total Cost							\$523,700.00		\$3,219,200.00
Reporting Contractor Profit/Loss or Fee							\$0.00		\$0.00
Total Price							\$523,700.00		\$3,219,200.00



cPET Summary

OSD CAPE

- Desktop and Web Versions
- Create and Edit CSDR Program and Contract Plans
- Create and Edit RDTs
- Transforms Flat-Files into approved 1921/1921-1 Forms
- Performs preliminary CSDR Validations
 - Numbers Add Up
 - Consistent Data Between 1921 and 1921-1
 - Tracks 1921/1921-1 to CSDR Contract Plan

It's Not Difficult!



CSDR Systems Overview

OSD CAPE

- Key DCARC IT Systems Supporting CSDR Functions
 - cPET (Web): Preparing CSDR Plans, RDT, Validations
 - cPET (Desktop): Preparing CSDR submissions, pre-validation
 - – CSDR-SR: Manages CSDR Submission and Review Business Functions
 - DACIMS: CSDR Repository Supporting Cost Estimating Functions



CSDR Submit and Review

CSDR Submit and Review (CSDR-SR)

OSD CAPE

- Manage CSDR Submission and Review functions (excluding 1921-3)
- Role-based security: Submitters and Reviewers



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When this document is printed, it needs to be stamped top and bottom with the appropriate classification.

CSDR Submit - Review



CSDR-SR - Submit & Review of 1921, 1921-1, 1921-2, 2630-1, 2630-2, 2630-3, CCDR, SRDR & CWBS

Username: mcgahanjj **Roles:** cPetWeb_User, CSDRSR_Reviewer, CSDRSR_Submitter, DACIMS35_Analyst, EVM_Analyst, EVM_Reviewer, EVM_Submitter

[DCARC Home](#)
[Contact Us](#)
[CSDR S-R Home](#)
[Upload Home](#)
[Review Submissions](#)

[Log Out](#)
[Help](#)

Welcome to CSDR S-R

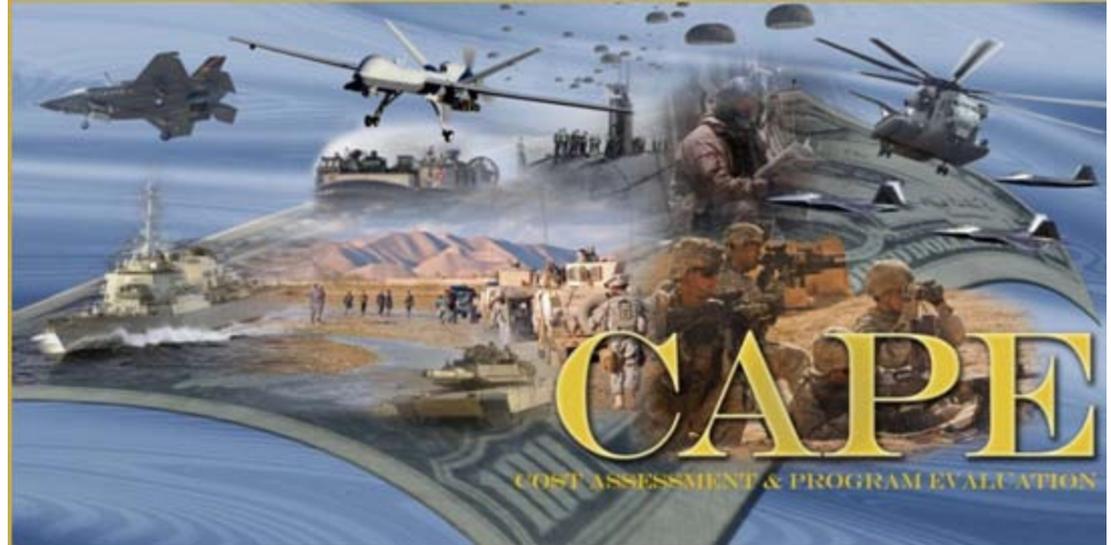
What's New

 [March 2011](#) - Submitters are now able to request access to a contract from Upload Home. Program Office Lead Reviewers can request a Submission Event Date Change. See attachment for more detailed information.

User Guides

 [Lead Reviewer Guide](#) - Illustrates to reviewers how to request an account, attach submitters/reviewers to their contracts, review/comment on data submissions, view CSDR plans, and review future submission events.

 [Submitter Guide](#) - Illustrates to submitters how to request an account, upload documents, and view CSDR plans.



CSDR Submit and Review (CSDR-SR)

OSD CAPE

- Submitters and "Upload Home": Access submission events and Contract Details

DC Home | Contact Us | CSDR S-R Home | Upload Home | Help

Upload Home

(*** CSDR Data Only, No EVM Data ***)

Submission Events | Assigned Contracts | Submissions in Progress | Rejected Submissions | Submission History | Contract Request

Submission Events

Date Range: All | Program: All Programs | Submission Stage: None | Contract: All

Event Name	Expected Files	Expected Of Date	Expected Submission Date	Prime Contract Number	Task	Task Number	Program Name	Submission ID	Submission Status	Submission Stage	In Progress	
LUT	1921,1921-1	6/30/2011	8/30/2011	DAAB07-02-C-C403	JTRS GMR	A-03-F-C1(R1)	JTRS GMR - Joint Tactical Radio System Ground Mobile Radio					Upload
LRIP 1 Delivery	1921,1921-1,1921-2	12/15/2011	2/15/2012	DAAB07-02-C-C403	JTRS GMR	D-09-A-C1	JTRS GMR - Joint Tactical Radio System Ground Mobile Radio					Upload
LRIP 2 Delivery	1921,1921-1,1921-2	3/15/2012	5/15/2012	DAAB07-02-C-C403	JTRS GMR	D-09-A-C1	JTRS GMR - Joint Tactical Radio System Ground Mobile Radio					Upload

Contract Detail

Prog: JTRS GMR - Joint Tactical Radio System Ground Mobile Radio | Ctr#: DAAB07-02-C-C403
 Ctr: The Boeing Company | Sub: BAE Systems

Contract Summary | Reviewers & Submitters | Contract Tasks/Plans | Submission Events | Received Submissions

Contract Summary:

Program Name: JTRS GMR - Joint Tactical Radio System Ground Mobile Radio

Program URI: urn:us:mil:osd:acq:cars:pro-360

Contract Number: DAAB07-02-C-C403

Contractor Name: The Boeing Company

CSDR Submit and Review (CSDR-SR)

OSD CAPE

- NEW: Request Access To A Contract

Upload Home

(** CSDR Data Only, No EVM Data **)

[Submission Events](#)[Assigned Contracts](#)[Submissions in Progress](#)[Rejected Submissions](#)[Submission History](#)[Contract Request](#)

Please enter the contract number of the request. After sending the request, the appropriate authority will review the request and act accordingly.

Contract Number:

Plan Number:

CSDR Submit and Review

OSD CAPE

- Access current CSDR Contract Plans

Contract Detail

Prog: **JTRS GMR – Joint Tactical Radio System Ground Mobile Radio** Ctr#: **DAAB07-02-C-C403**
 Ctr: **The Boeing Company** Sub: **BAE Systems**

[Contract Summary](#)
[Reviewers & Submitters](#)
[Contract Tasks/Plans](#)
[Submission Events](#)
[Received Submissions](#)

Contract Tasks/Plans

Contract Task	Plan Number	Phase	Model	Effort	Contract Plans
JTRS GMR	A-03-F-C1-S1(R2)	Dev	JTRS GMR	JTRS GMR Sub	View
JTRS GMR	D-09-A-C1-S3	LRIP	JTRS GMR	JTRS GMR Sub	View

Contract Tasks/Plans

Contract Task	Plan Number	Phase	Model	Effort	Contract Plans
JTRS GMR	A-03-F-C1-S1(R2)	Dev	JTRS GMR	JTRS GMR Sub	Hide
Plan Number	Active	Plan Date	Comments	XML	Non-XML
A-03-F-C1-S1(R2)	<input checked="" type="checkbox"/>	3/23/2010		20100203 JTRS GMR SDD A-03-F-C1(R2) Boeing.cplan.xml	20100203 JTRS GMR SDD A-03-F-C1(R2) Boeing.xls
JTRS GMR	D-09-A-C1-S3	LRIP	JTRS GMR	JTRS GMR Sub	View

CSDR Submit and Review

OSD CAPE

• Making a Submission – Step 1

Event Name	Expected Files	Expected As Of Date	Expected Submission Date	Prime Contract Number	Task	Plan Number	Program Name	Submission ID	Submission Status	Submission Stage	In Progress	
LUT	1921,1921-1	6/30/2011	8/30/2011	DAAB07-02-C-C403	JTRS GMR	A-03-F-C1(R1)	JTRS GMR – Joint Tactical Radio System Ground Mobile Radio					Upload
LRIP 1 Delivery	1921,1921-1,1921-2	12/15/2011	2/15/2012	DAAB07-02-C-C403	JTRS GMR	D-09-A-C1	JTRS GMR – Joint Tactical Radio System Ground Mobile Radio					Upload
LRIP 2 Delivery	1921,1921-1,1921-2	3/15/2012	5/15/2012	DAAB07-02-C-C403	JTRS GMR	D-09-A-C1	JTRS GMR – Joint Tactical Radio System Ground Mobile Radio					Upload

Submission Event

Plan Number: d
 Submission Event: 1
 Expected Files: 1921
 Expected As Of Date: 8/3/2010
 Expected Submission Date: 8/3/2010

Submission Details

As Of Date:  

Comment:
(Max 256 chr.)

Point of Contact Information

Name:

Phone:

Fax:

Email:

Enter an As Of Date, Name, Phone, and Email address and press the 'Next' button to continue.



CSDR Submit and Review

OSD CAPE

• Making a Submission – Step 2

Upload Submission

[Back](#) | [Cancel Submission](#)

Step 2 of 4

[Instructions](#)

Upload the required files for this Submission Event and specify the appropriate file types. Note: If you want to validate a 1921 or 1921-1 document, you must upload an xls or xml file. After all the required files are attached, you may press 'Next' to continue.

Prog: JTRS GMR – Joint Tactical Radio System Ground Mobile Radio	Ctr#: DAAB07-02-C-C403
Ctr: The Boeing Company	Sub:

[Submission Info](#)
[Files](#)
[Validation](#)
[Review & Submit](#)

Unclassified Documents Only

[Required Files](#)
[Select a file to Upload](#)

Caution: The total size of each file must be less than 30 mb.

 Please select a File Type. File Comment:
[Uploaded Files](#)

	File Name	File Type	File Comment	Actions
	Johns Demo 1921 FORM.xls	1921		
	Johns Demo 1921 Flat File.1921.xml	Other		

[Back](#)
[Next](#)

Upload the required files for this Submission Event and specify the appropriate file types. Note: If you want to validate a 1921 or 1921-1 document, you must upload an xls or xml file. After all the required files are attached, you may press 'Next' to continue.

CSDR Submit and Review

OSD CAPE

• Making a Submission – Step 3

Upload Submission

[Back](#) | [Cancel Submission](#)

Step 3 of 4

[Instructions](#)

Select a 1921 or a 1921 and 1921-1 pair and the corresponding contract plan and press validate to check the Submission files for errors.

Prog: JTRS GMR – Joint Tactical Radio System Ground Mobile Radio	Ctr#: DAAB07-02-C-C403
Ctr: The Boeing Company	Sub:

[Submission Info](#)
[Files](#)
[Validation](#)
[Review & Submit](#)
[Select Validation Options](#)
1921 ▾1921-1 ▾Contract Plan Number ▾
[Submission Event](#)

Submission Event Number: 1

Submission Event Name: 1

Assigned Plan Number: d

[Working Files](#)

There are no working files.

New: Excel 2007 Is Now Supported

Select a 1921 or a 1921 and 1921-1 pair and the corresponding contract plan and press validate to check the Submission files for errors.



CSDR Submit and Review

- Making a Submission – Step 4

Upload Submission

[Back](#) | [Cancel Submission](#)

Step 4 of 4: Final Step

Instructions
Review the Submission inputs and Submission warnings. Press the 'Submit' button at the bottom of the page to complete this Submission.

Prog: JTRS GMR – Joint Tactical Radio System Ground Mobile Radio	Ctr#: DAAB07-02-C-C403
Ctr: The Boeing Company	Sub:

Submission Info
Files
Validation
Review & Submit

Contract Information

<p>Program Name: JTRS GMR – Joint Tactical Radio System Ground Mobile Radio</p> <p>Contract Number: DAAB07-02-C-C403</p> <p>Sub Contract Number:</p> <p>Military Handbook: ELECTRONIC/AUTOMATED SOFTWARE</p> <p>Weapon System Type: Non MIL-STD-196E Designated System</p>	<p>Program URI: urn:us:mil:osd:acq:cars:pno-360</p> <p>Contractor Name: The Boeing Company</p> <p>Sub Contractor Name:</p> <p>Service: ARMY</p> <p>Contract Type: CPAF</p>	<p>Program Manager: Ralph N. Moslener</p> <p>Contractor Division: IDS - Network and Space Systems A.CA</p> <p>Sub Contractor Division:</p> <p>Prime/Sub: Prime</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Submission Event</p> <p>Plan Number: d</p> <p>Selected Event: 1</p> <p>Expected Files: 1921</p> <p>Expected As Of Date: 8/3/2010</p> <p>Expected Submission Date: 8/3/2010</p>	<p>Submission Details</p> <p>As Of Date: 8/3/2010</p> <p>Comment:</p>	<p>Point of Contact Information</p> <p>Name: John McGahan</p> <p>Phone: 253 564 1029</p> <p>Fax:</p> <p>Email: jmcgahan@tecolote.com</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------

Uploaded Files

	File Name	File Type	File Comment
	Johns Demo 1921 FORM.xls	1921	
	Johns Demo 1921 Flat File.1921.xml	Other	

Submission Warnings (Not including file validation)

Missing Validation Files

[Back](#)

[Submit](#)

Review the Submission inputs and Submission warnings. Press the 'Submit' button at the bottom of the page to complete this Submission.



CSDR Systems Overview

OSD CAPE

- Key DCARC IT Systems Supporting CSDR Functions
 - cPET (Web): Preparing CSDR Plans, RDT, Validations
 - cPET (Desktop): Preparing CSDR submissions, pre-validation
 - CSDR-SR: Manages CSDR Submission and Review Business Functions
 - DACIMS: CSDR Repository Supporting Cost Estimating Functions



DACIMS - CSDR Repository

Published Submission in DACIMS

OSD CAPE

DCARC The Defense Automated Cost Information Management System (DACIMS)
Enhancing DoD Cost Analysis

DACIMS 3.5 Library

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DCARC Home Home Library Contact Us

Document Library Username: Alexis789 [Log Out](#)

Folder Name: Aircraft

0 Document(s) 50 Results per page Component Filter: (all)

No documents were found at this location

- Current CSDR Library folder contains actively reporting programs
- Organized by Mil-Handbook

Business Base Data

Current CSDR Library

Aircraft

AB3 - Apache Block III

Air Vehicle

Dev

W58RGZ-05-C-0001

Drive System Sub (Northstar)

Prime (The Boeing Company)

REU/TCDL

ACS - Aerial Common Sensor

ARH - Armed Reconnaissance Helicopter

AWACS Upgrade - Airborne Warning and Control System

B-1 CMUP - B-1 LANCER Penetrating Bomber Conversion

B-2 EHF SATCOM AND COMPUTER INCREMENT I -

B-2 RMP - B-2 Radar Modernization Program

B-2 Training System Contractor Logistics Support (

BLACK HAWK (UH-60L) - Utility Helicopter



DACIMS

OSD CAPE

• Document Mode

Document / File Mode Toggle

Select	Details	Titles	Folder Path	Contract Task Information	Report As Of Date
<input type="checkbox"/>		1921, 1921-1 (Front) (7/31/2006). AH-64 (Longbow Apache) - W58RGZ-05-C-0239 (LBL Northrop Grumman)	Current CSDR Library\Aircraft\AB3 - Apache Block III\REU\TCDL\Dev\W58RGZ-05-C-0239\Sub (Northrop Grumman Corporation)	Dev	07/31/2006
<input type="checkbox"/>		CWBS Dictionary (4/19/2006). Apache Block III Risk Reduction - W58RGZ-05-C-0001 (The Boeing Company)	Current CSDR Library\Aircraft\AB3 - Apache Block III\AH-64D Block III\Dev\W58RGZ-05-C-0001\Prime (The Boeing Company)	Risk Reduction	04/19/2006
<input type="checkbox"/>		1921, 1921-1 (Front) Final (7/31/2006). AH-64 (Longbow Apache)- RR Complete Final Report- W58RGZ-05-C-0239 (LBL-NG)	Current CSDR Library\Aircraft\AB3 - Apache Block III\REU\TCDL\Dev\W58RGZ-05-C-0239\Sub (Northrop Grumman Corporation)	SDD	07/31/2006
<input type="checkbox"/>		2630-2 (1/20/2006). UAV Level 4 Control, AH-64 (Longbow Apache) - W58RGZ-05-C-0239 (LBL-Northrop Grumman)	Current CSDR Library\Aircraft\AB3 - Apache Block III\REU\TCDL\Dev\W58RGZ-05-C-0239\Sub (Northrop Grumman Corporation)	SDD	01/20/2006

• File Mode

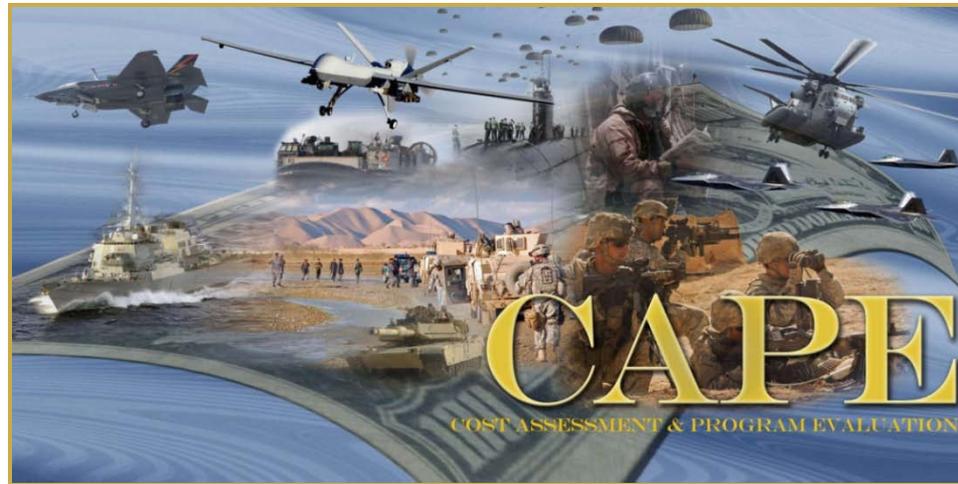
Select	Details	Titles	Type	Files	Folder Path	Contract Task Information
<input type="checkbox"/>		CWBS Dictionary (1/31/2008). AH-64 (Longbow Apache) - W58RGZ-05-C-0001 (Northstar)	CWBS Dictionary	20080717-35327_AH-64 (LongbowApache)_CWBSDictionary_W58RGZ-0001_Northstar_20080131.pdf	CSDR Aircraft\AB3 - Block III\AH-64D Dev\W58RGZ-05-Drive System Sub (Northstar)	Jan 31 2008
<input type="checkbox"/>		CWBS Dictionary (1/31/2008). AH-64 (Longbow Apache) - W58RGZ-05-C-0001 (Northstar)	Validation Memo	20080731_AB3_CWBS_SDD_Northstar_Aerospace_W58RGZ-05-C-0001_A-05-J-C3-S1(R)_ACCEPTED.pdf	Current CSDR Library\Aircraft\AB3 - Apache Block III\AH-64D Block III\Dev\W58RGZ-05-C-0001\Drive System Sub (Northstar)	Jan 31 2008

Questions?

DCARC Portal Help Desk
Jen Horner
253 564-1979 x1

DCARC Program Manager
John McGahan
253 564-1979 x2

DCARC IT Help Desk
Mark Gray
571 372-4400



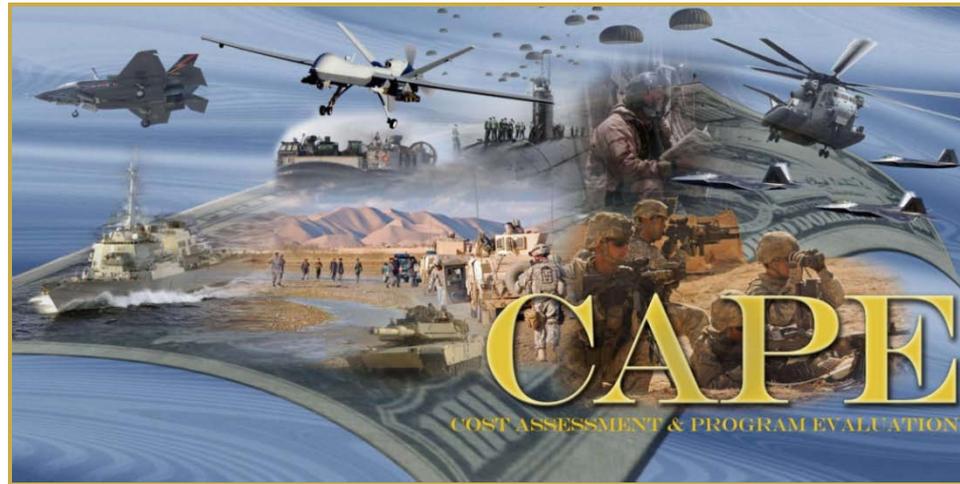


Acronyms

OSD CAPE

ACAT	Acquisition Category	DID	Data Item Description
AFCAA	Air Force Cost Analysis Agency	DoD	Department of Defense
AIS	Automated Information System	EAC	Estimate At Completion
CARD	Cost Analysis Requirements Description	EMD	Engineering and Manufacturing Development
CAPE	Cost Assessment and Program Evaluation	FCHR	Functional Cost-Hour Report
CAS	Cost Accounting Standard	FMS	Foreign Military Sales
CBDR	Contractor Business Data Report	FRP	Full Rate Production
CCDR	Contractor Cost Data Report	G&A	General and Administrative
CDR	Critical Design Review	GFE	Government Furnished Equipment
CDRL	Contractor Data Requirements List	IOT&E	Initial Operational Test and Evaluation
CDSR	Cost Data Summary Report	LRIP	Low Rate Initial Production
CFE	Contractor Furnished Equipment	MAIS	Major Automated Information System
CLS	Contractor Logistics Support	MDAP	Major Defense Acquisition Program
CSDR	Cost and Software Data Report	MIL-HDBK	Military Handbook
CWBS	Contract Work Breakdown Structure	MIL-STD	Military Standard
CWIPT	Cost Working Integrated Product Team	NCCA	Naval Center for Cost Analysis
DAB	Defense Acquisition Board	O&S	Operations and Support
DACIMS	Defense Automated Cost Information Management System	OIPT	Overarching Integrated Product Team
DASA-CE	Deputy Assistant Secretary of the Army for Cost and Economics	OSD	Office of the Secretary of Defense
DCAA	Defense Contract Audit Agency	PCR	Progress Curve Report
DCARC	Defense Cost and Resource Center	PDR	Preliminary Design Review
DCMA	Defense Contract Management Agency	RDT&E	Research, Development, Test and Evaluation
DDCA	Deputy Director of Cost Assessment	RFP	Request for Proposals
DFARS	Defense Federal Acquisition Regulation Supplement	SDD	System Development and Demonstrations
		SDRL	Subcontractor Data Requirements List
		SRDR	Software Resources Data Reporting
		TD	Technology Development

Understanding the Software Resource Data Reports (SRDR) Requirements



November 30, 2011



Outline

OSD CAPE

1. The role of SRDRs
2. SRDR Planning
3. SRDR Data Elements
4. SRDR Dictionary



The Need for Software Data

OSD CAPE

- Software development cost is a significant part of today's weapon system development cost
- Government analysts use actuals from other completed software development projects as a basis for their software cost estimates
- The data are used in different ways to underpin a software cost estimate. For example:
 - As a basis for sizing estimates
 - Application of a direct analogy
 - Calibration of commercial software cost models
 - Development of custom gov't models through statistical analysis



What is the SRDR?

OSD CAPE

- The Software Resource Data Report is a contract data deliverable that formalizes the reporting of software metric data. It consists of
 - Data Report
 - Data Dictionary
- It is designed to record both the **expectations** and **actual results** of new software developments or upgrades



Authority

OSD CAPE

- The SRDR is a contract reporting requirement identified in Enclosure 4, DoDI 5000.02, Table 4. It applies to:
 - “All major **contracts** and **subcontracts**, regardless of contract type, for contractors developing/producing software elements within ACAT I and IA programs and pre-MDAP and pre-MAIS programs subsequent to Milestone A approval for any software development element with a projected software effort greater than \$20M (then-year dollars).”
- Guidance for implementation of SRDRs is provided in DoD 5000.04-M-1



SRDR Planning

OSD CAPE

- The SRDR planning process, conducted by the CWIPT establishes who must submit SRDRs, what elements must be reported, and when the SRDRs shall be submitted
- This planning information is captured on separate contract CSDR plans (form DD 2794) for each reporting contractor
- The Resource Distribution Table is used to facilitate identification of major software development efforts



SRDR Planning

OSD CAPE

1. Who must report
2. What elements to report
3. When to report



Who Must Submit SRDRs?

OSD CAPE

- Reporting requirement is established on a contract basis, not by individual software element
- All contractors (primes and subs) deliver their SRDR data directly to the government.
- Prime contractors are required to flow down SRDR requirements to all affected sub-contractors

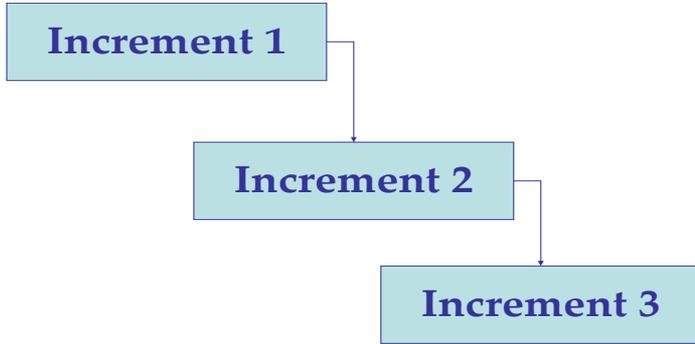
Contractor	SW Value	Who Reports?
Prime (+ Sub-Ctr)	<\$20M	No report required**
	>\$20M	Prime
Sub-Ctr Only	>\$20M	Sub-Ctr (Direct report to the Gov't)
	<\$20M	Data is reflected in the prime's SRDR report (if the prime is required to submit SRDRs)

****Exception:** *“The SRDR requirement on high-risk or high-technical-interest contracts priced below \$20 million is left to the discretion of the DoD PM with approval by the Chair, CAIG” – Encl 4, DoDI 5000.02, Table 4*

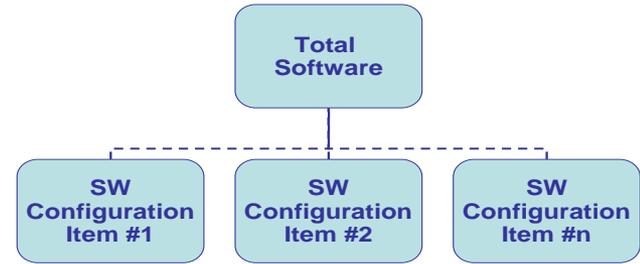


What Constitutes SW Development?

OSD CAPE

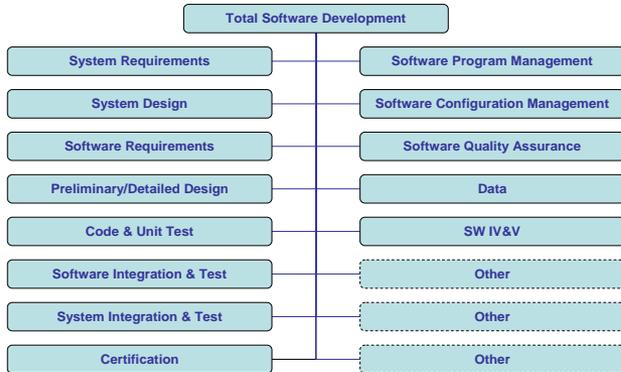


Consider All Increments

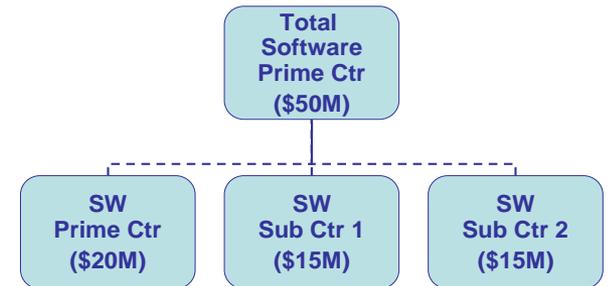


Consider All Components

The Government Uses a Comprehensive Definition



Consider All Activities



Consider All Contracts



SRDR Planning

OSD CAPE

1. Who must report
2. What elements to report
3. When to report



Identify WBS Elements to Report

OSD CAPE

- What elements within the system contain software?
- Software exists throughout the system
 - Embedded software within prime mission equipment
 - Applications running on general purpose computers
 - Mission simulator software within training equipment
 - Support software such as mission planning
 - Specialized test software such as SIM/STIM
- For every appropriate element identified, it must be reported in the SRDR



Identify Reporting Elements

OSD CAPE

COST AND SOFTWARE DATA REPORTING PLAN											
									Form Approved OMB No. 0704-0188		
The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.											
1a. PROGRAM (MDAP) Mountain DEW		1b. PRIME MISSION PRODUCT Mountain DEW			1c. MILESTONE A: <input type="checkbox"/> B: <input type="checkbox"/> C: <input checked="" type="checkbox"/> LRIP D: <input type="checkbox"/> PRODUCTION		2. MIL-HDBK-881 APPENDIX USED Unmanned Air Vehicle Systems				
3. SUBMISSION TYPE <input checked="" type="checkbox"/> INITIAL <input type="checkbox"/> CHANGE				4. CURRENT SUBMISSION DATE (YYYYMMDD) 20070731		5. LAST APPROVED PLAN DATE (YYYYMMDD) None					
6a. POINT OF CONTACT (POC) NAME AND ADDRESS (Include ZIP Code) F. Binight 58 Runway Rd Los Angeles, CA 90006					6b. TELEPHONE NUMBER (Include Area Code) 123-456-7890		6c. FAX NUMBER (Include Area Code) 123-456-7891	6d. E-MAIL ADDRESS fbinight@MDEW.com			
7. PLAN TYPE <input checked="" type="checkbox"/> PROGRAM <input type="checkbox"/> CONTRACT				8. PREPARING ORGANIZATION Mountain DEW Joint Program Office		9. APPROVED PLAN NUMBER					
10. WBS ELEMENT CODE											
a. PROGRAM	b. CONTRACT	11. WBS REPORTING ELEMENTS			12a. CONTRACTOR NAME	12b. CONTRACT NUMBER	a. CWBS DICTIONARY	b. DD 1921 (CDSR)	c. DD 1921-1 (FCHR)	d. DD 1921-2 (PCR)	e. SRDR FORMATS
1.0		UAV System					X	X			
1.1		Air Vehicle					X	X			
1.1.1		Airframe					X	X			
1.1.2		Propulsion					X	X	X		
1.1.3		Communications/Identification					X	X			
1.1.4		Navigation/Guidance					X	X			
1.1.5		Central Computer					X	X			
1.1.6		Auxiliary Equipment					X	X			
1.1.7		Air Vehicle Application Software					X	X			
1.1.8		Air Vehicle System Software					X	X			
1.1.9		Integration, Assembly, Test, and Checkout					X	X			
1.2		Payload (1...n)					X	X	X		
1.2.1		Survivability					X	X			
1.2.2		Reconnaissance					X	X			
1.2.3		Electronic Warfare					X	X			
1.2.4		Armament					X	X			
1.2.5		Weapons Delivery					X	X			
1.2.6		Payload Application Software					X	X			
1.2.7		Payload System Software					X	X			
1.2.8		Integration, Assembly, Test, and Checkout					X	X			
1.3		Ground Segment					X	X	X		
1.3.1		Ground Control Systems					X	X			
1.3.2		Command and Control Subsystem					X	X			
1.3.3		Launch and Recovery Equipment					X	X			
1.3.4		Transport Vehicles					X	X			
1.3.5		Ground Segment Application Software					X	X			
1.3.6		Ground Segment Software					X	X			
1.3.7		Integration, Assembly, Test, and Checkout					X	X			
1.4		System Integration, Assembly, Test, and Checkout					X	X			
1.5		System Engineering/Program Management					X	X			
1.6		System Test and Evaluation					X	X			
1.6.1		Development Test and Evaluation					X	X			
1.6.2		Operational Test and Evaluation					X	X			
1.6.3		Mock-ups / System Integration Labs (SILs)					X	X			
1.6.4		Test and Evaluation Support					X	X			
1.6.5		Test Facilities					X	X			
1.7		Training					X	X			
1.7.1		Equipment					X	X			
1.7.2		Services					X	X			
1.7.3		Facilities					X	X			
1.8		Data					X	X			
1.8.1		Technical Publications					X	X			
1.8.2		Engineering Data					X	X			
1.8.3		Management Data					X	X			
1.8.4		Support Data					X	X			
1.8.5		Data Depository					X	X			
1.9		Peculiar Support Equipment					X	X			

SRDR reporting requirements are specified in Box 13e of Cost and Software Data Reporting Plan (DD 2794).

Initial SW Reporting Req't's are identified by the CWIPT on the Program Plan and elaborated on the Contract Plan.

Rule of Thumb: If it's got 'SLOC', put an 'X' in the SRDR block.

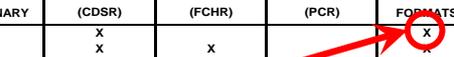


Identify Reporting Elements

OSD CAPE
Form Approved
OMB No. 0704-0188

COST AND SOFTWARE DATA REPORTING PLAN											
The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.											
1a. PROGRAM (MDAP) Mountain DEW		1b. PRIME MISSION PRODUCT Mountain DEW		1c. MILESTONE A <input type="checkbox"/> B <input type="checkbox"/> C: LRIP <input checked="" type="checkbox"/> C: PRODUCTION <input type="checkbox"/>		2. MIL-HDBK-881 APPENDIX USED Unmanned Air Vehicle Systems					
3. SUBMISSION TYPE X INITIAL <input type="checkbox"/> CHANGE			4. CURRENT SUBMISSION DATE (YYYYMMDD) 20070731			5. LAST APPROVED PLAN DATE (YYYYMMDD) None					
6a. POINT OF CONTACT (POC) NAME AND ADDRESS (Include ZIP Code) F. Binight 58 Runway Rd Los Angeles, CA 90006			6b. TELEPHONE NUMBER (Include Area Code) 123-456-7890		6c. FAX NUMBER (Include Area Code) 123-456-7891		6d. E-MAIL ADDRESS fbinight@MDEW.com				
7. PLAN TYPE X PROGRAM <input type="checkbox"/> CONTRACT			12a. CONTRACTOR NAME X PRIME <input type="checkbox"/> SUB		8. PREPARING ORGANIZATION Mountain DEW Joint Program Office		9. APPROVED PLAN NUMBER				
10. WBS ELEMENT CODE		11. WBS REPORTING ELEMENTS			12b. CONTRACT NUMBER		a. CWBS DICTIONARY	b. DD 1921 (CDSR)	c. DD 1921-1 (FCHR)	d. DD 1921-2 (PCR)	e. SRDR FORMATS
a. PROGRAM	b. CONTRACT										
1.0		UAV System					X	X			X
1.1		Air Vehicle					X	X	X		X
1.1.1		Airframe					X	X			X
1.1.2		Propulsion					X	X			X
1.1.3		Communications/Identification					X	X			X
1.1.4		Navigation/Guidance					X	X			X
1.1.5		Central Computer					X	X			X
1.1.6		Auxiliary Equipment					X	X			X
1.1.7		Air Vehicle Application Software					X	X			X
1.1.8		Air Vehicle System Software					X	X			X
1.1.9		Integration, Assembly, Test, and Checkout					X	X			X
1.2		Payload (1...n)					X	X	X		X
1.2.1		Survivability					X	X			X
1.2.2		Reconnaissance					X	X			X
1.2.3		Electronic Warfare					X	X			X
1.2.4		Armament					X	X			X
1.2.5		Weapons Delivery					X	X			X
1.2.6		Payload Application Software					X	X			X
1.2.7		Payload System Software					X	X			X
1.2.8		Integration, Assembly, Test, and Checkout					X	X			X
1.3		Ground Segment					X	X	X		X
1.3.1		Ground Control Systems					X	X			X
1.3.2		Command and Control Subsystem					X	X			X
1.3.3		Launch and Recovery Equipment					X	X			X
1.3.4		Transport Vehicles					X	X			X
1.3.5		Ground Segment Application Software					X	X			X
1.3.6		Ground Segment Software					X	X			X
1.3.7		Integration, Assembly, Test, and Checkout					X	X			X
1.4		System Integration, Assembly, Test, and Checkout					X	X			X
1.5		System Engineering/Program Management					X	X			X
1.6		System Test and Evaluation					X	X			X
1.6.1		Development Test and Evaluation					X	X			X
1.6.2		Operational Test and Evaluation					X	X			X
1.6.3		Mock-ups / System Integration Labs (SILs)					X	X			X
1.6.4		Test and Evaluation Support					X	X			X
1.6.5		Test Facilities					X	X			X
1.7		Training					X	X			X
1.7.1		Equipment					X	X			X
1.7.2		Services					X	X			X
1.7.3		Facilities					X	X			X
1.8		Data					X	X			X
1.8.1		Technical Publications					X	X			X
1.8.2		Engineering Data					X	X			X
1.8.3		Management Data					X	X			X
1.8.4		Support Data					X	X			X
1.8.5		Data Depository					X	X			X
1.9		Peculiar Support Equipment					X	X			X

'Total' is a mandatory element that must also be identified





Identify Reporting Elements

OSD CAPE

- Identify all elements requiring software development (even if the development is performed by a sub-contractor)
- Include elements that contain software, even if little development will occur on that element. This ensures the SRDR will adhere to DID requirements for reporting total delivered software size.
- Don't place X's on non-software products such as integration or systems engineering
- Don't omit reporting because a software element fails to exceed \$20M. The overall SRDR requirement is established at the contract level.



SRDR Planning

OSD CAPE

1. Who must report
2. What elements to report
3. When to report



Identify When to Report

OSD CAPE

- Reporting events are specified in Box 14 of the *Contract Plan* (DD 2794)
- There are two types of reporting events
 - Contract Event: SRDR is required at contract start (Initial Developer Report) and at contract completion (Final Developer Report)
 - Product Event: SRDR is required at start of a product 'increment' (Initial Developer Report) and at completion of product 'increment' (Final Developer Report)
- Do not include the Initial Government Report on the contract plan. It is prepared by the program office and is identified on the program plan.



Identify When to Report

OSD CAPE

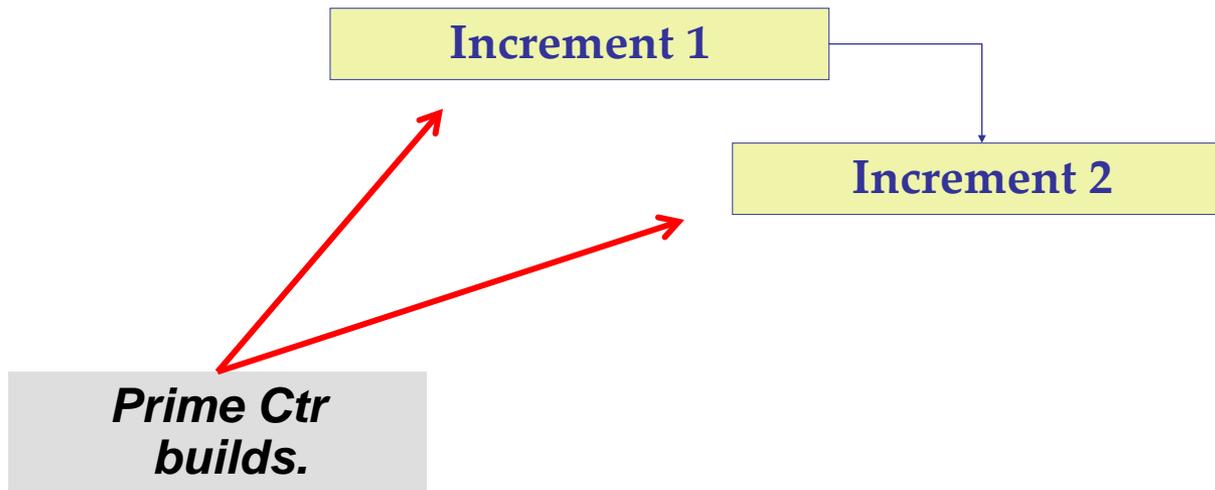
- What is the definition of an ‘increment’?
 - A partial **delivery** of a product capability. Also referred to as spiral, increment, build, release, etc
 - The Government is not seeking SRDRs on the contractor’s internal engineering builds which generally consist of many builds
- Sub-contractor increments may be defined as a partial **delivery** of product to the prime contractor (possibly on a build schedule different than the prime’s build schedule)

These definitions should be clearly defined and agreed upon by the CWIPT



What is an Increment?

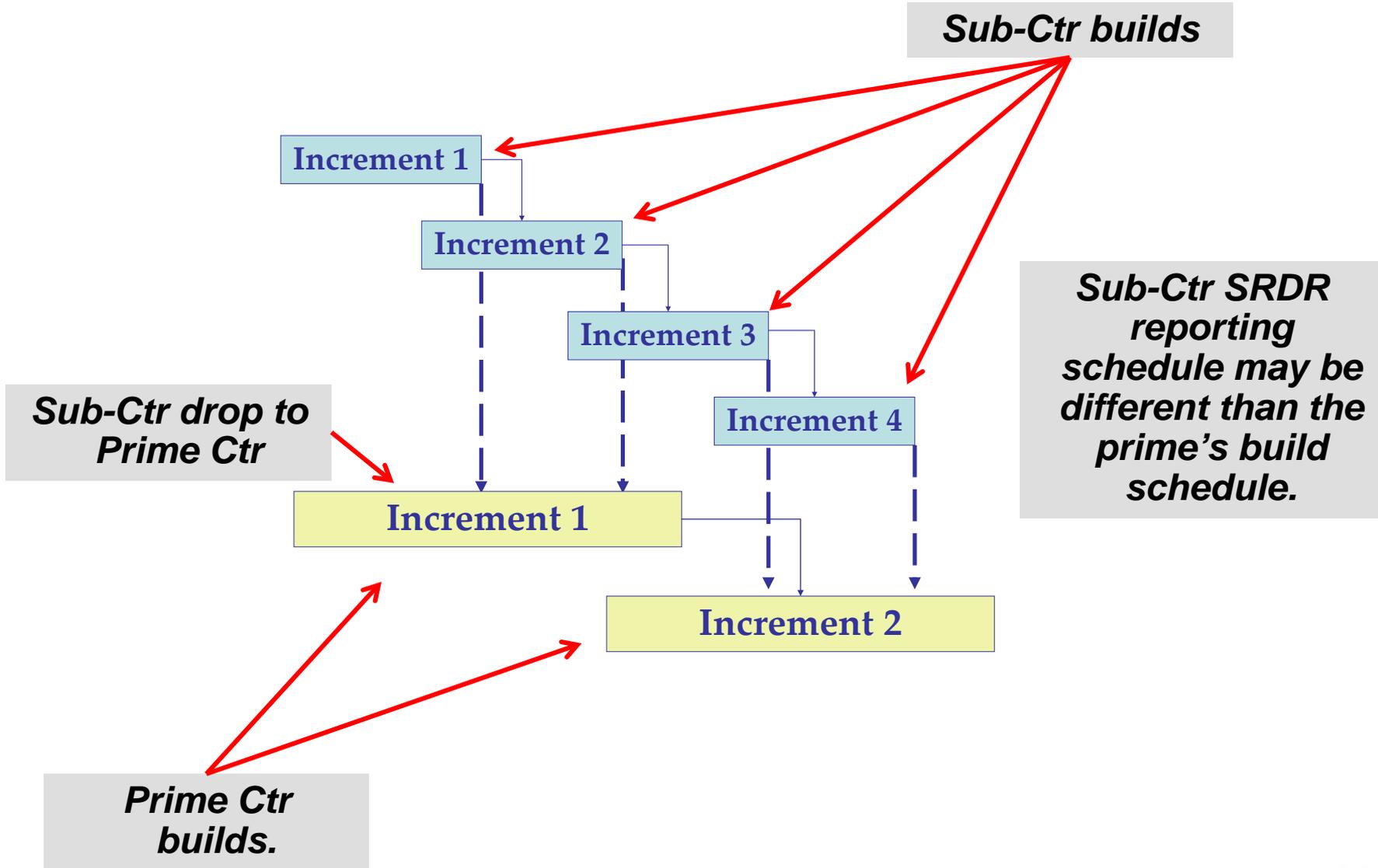
OSD CAPE





What is an Increment?

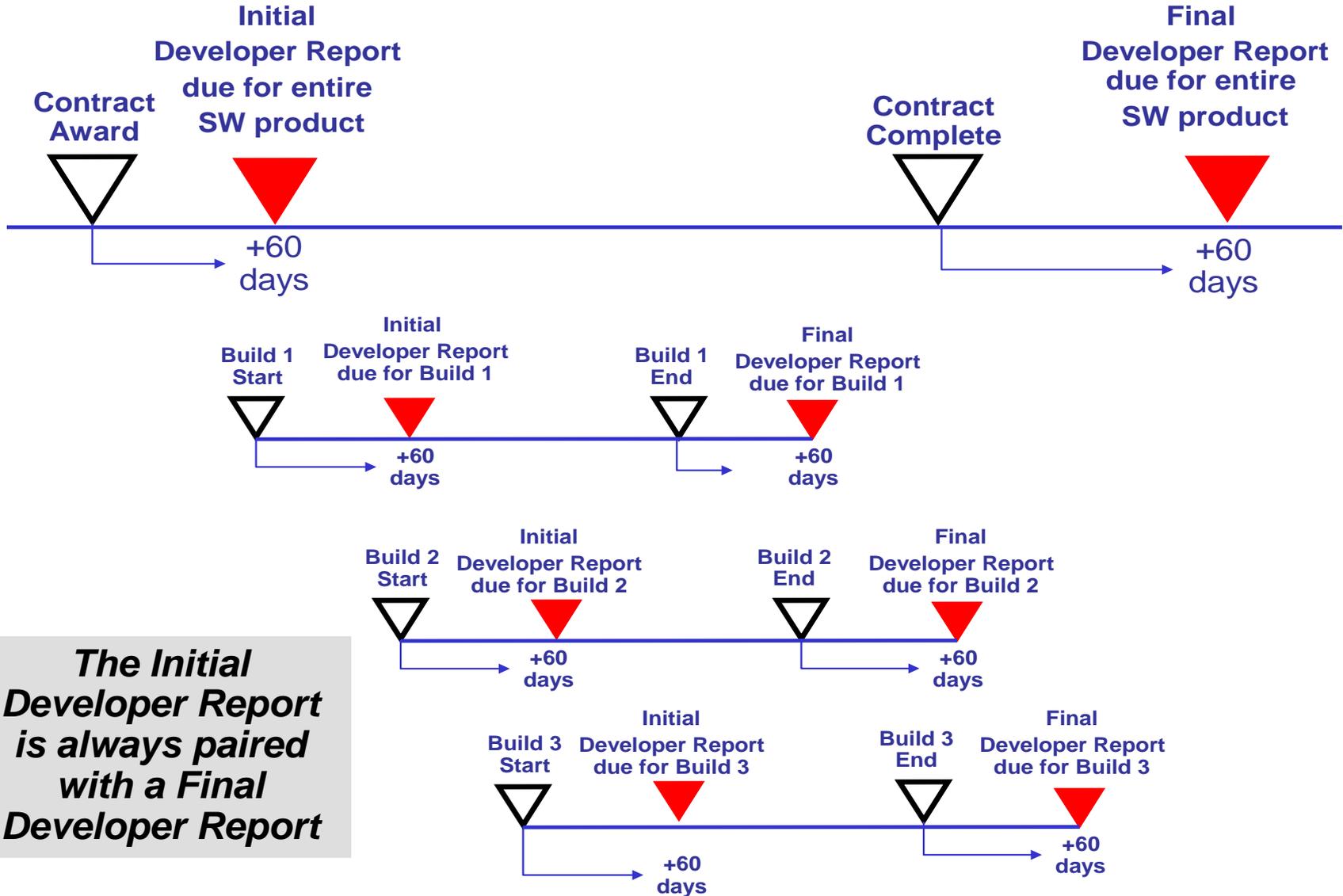
OSD CAPE





Identify When to Report

OSD CAPE



The Initial Developer Report is always paired with a Final Developer Report

Identify When to Report

OSD CAPE

14. CSDR SUBMISSION DATES				
a. SUBMISSION	b. FORM(S)	c. EVENT	d. AS OF DATE (YYYYMMDD)	e. DUE DATE (YYYYMMDD)
1	1921, 1921-1	UAV Inc Initial Report (Contract Award 11/1/2007)	20080229	20080429
2	1921, 1921-1	UAV Inc Interim Report (CDR 2/1/2009)	20090601	20090731
3	1921, 1921-1	UAB Inc Final Report	20111101	20111231
4	Contract WBS Dictionary	UAV Inc Initial Report (Contract Award 11/1/2007)	20071101	20071231
5	Initial Developer Report	UAV Inc Initial Report (Contract Award 11/1/2007)	20071101	20071231
6	Initial Developer Report	UAV Inc Initial Report (Inc 1 12/1/2007)	20071201	20080130
7	Final Developer Report	UAV Inc Final Report (Inc 1 1/1/2009)	20090101	20090302
8	Initial Developer Report	UAV Inc Initial Report (Inc 2 6/1/2008)	20080601	20080731
9	Final Developer Report	UAV Inc Final Report (Inc 2 3/1/2010)	20100301	20100430
10	Final Developer Report	UAV Inc Final Report (Contract Complete)	20111001	20111130

The Initial Developer Report is always paired with a Final Developer Report

- **Report an Initial Developer Report and a Final Developer Report for the entire contract.**
- **Report an Initial Developer Report and a Final Developer Report for each individual software increment/release/build.**
- **Contracts with only one increment/release/build need only to report an Initial Developer Report and a Final Developer Report once for the entire contract.**



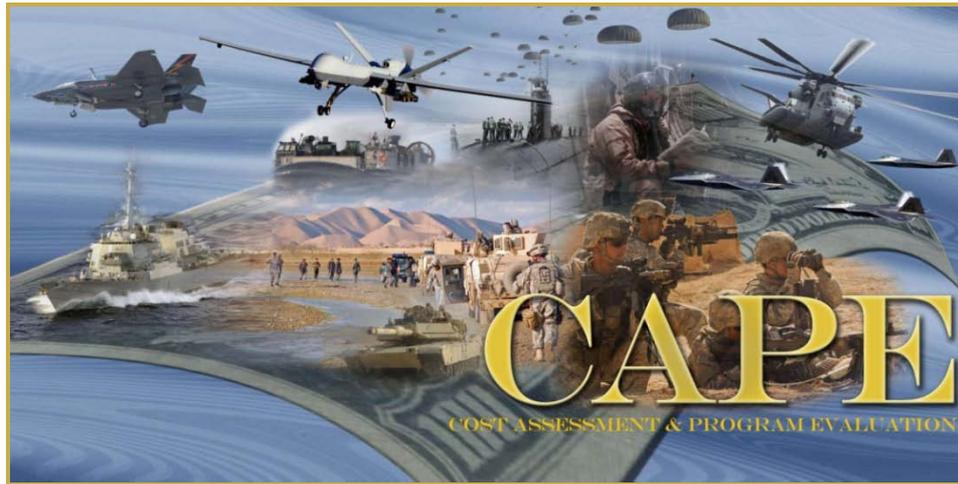
Scope of Data Reported*

OSD CAPE

- If reporting event is **contract start** or **contract end** then the scope of the SRDR data must reflect the entire development effort
- If the reporting event is **increment start** or **increment end** then the scope of the SRDR data must reflect that specific increment only

* DID Section 3

Overview of SRDR Data Elements





Reporting Details

OSD CAPE

- Data reporting instructions for SRDR submissions are specified in Data Item Description (DID)
 - SRDR: Initial Developer Report – Captures estimates of the software development - *DI-MGMT-81739B*
 - SRDR: Final Developer Report – Captures actuals of the software development - *DI-MGMT-81740A*



Important Tailoring Features

OSD CAPE

- Both the data and the report format of the SRDR can be tailored
- The SRDR DID broadly describes the data field requirements
 - Allows contractors to report data that is already collected as part of the company's metrics and accounting practices
 - The data conforms to the company's internal definitions



Context and Development Organization

(1/3)

OSD CAPE

This section essentially contains SRDR meta-data

- Major Program* (3.1.2)
 - Name
 - Phase/Milestone
- Reporting Organization Type* (3.1.3)
 - Prime/Associate Contractor
 - Direct-Reporting Subcontractor
 - Government
- Name/Address* (3.1.4)
 - Reporting Organization
 - Division
- Approved Plan Number* (3.1.5)

* This information could be common to every WBS element reported in the SRDR

Context and Development Organization

(2/3)

OSD CAPE

- Customer (Direct-Reporting Subcontractor Use Only)* (3.1.6)
- Contract Type* (3.1.7)
- WBS Element Code/WBS Reporting Element (3.1.8)
- Type Action* (3.1.9)
 - Contract Number
 - Latest Modification
 - Solicitation Number
 - Task Order/Delivery Order/Lot Number
- Period of Performance* (3.1.10)
- Appropriation* (3.1.11)
- Submission Number* (3.1.12)
- Resubmission Number* (3.1.13)

* This information could be common to every WBS element reported in the SRDR

Context and Development Organization

(3/3)

OSD CAPE

- Report As Of Date* (3.1.14)
- Point of Contact* (3.1.15)
- Development Organization (3.1.16)
- Software Process Maturity (3.1.17)
- Precedents (3.1.18)
- SRDR Data Dictionary Filename* (3.1.19)
- Comments (3.1.20)

* This information could be common to every WBS element reported in the SRDR



Product and Development Description

OSD CAPE

This section provides information about the software product and descriptive detail about the software development effort

- Functional Description (3.2.1)
- Software Development Characterization (3.2.2)
- Application Type (3.2.3)
 - Primary and Secondary Programming language (3.2.3.1)
 - Percentage of Overall Product Size (3.2.3.2)
 - Development Process (3.2.3.3)
 - SW Development Method (3.2.3.4)
 - Upgrade or New Development? (3.2.3.5)
 - Software Reuse (3.2.3.6)
- COTS/GOTS Applications Used (3.2.4)
 - Name (3.2.4.1)
 - Integration Effort (Optional) (3.2.4.2)
- Staffing (3.2.5)
 - Peak Staff (3.2.5.1)
 - Peak Staff Date (3.2.5.2)
 - Hours per Staff-Month* (3.2.5.3)
- Personnel Experience by Domain (3.2.6)
- Comments (3.2.7)

* This information could be common to every WBS element reported in the SRDR



Product Size

OSD CAPE

Provides information on code size

- Requirements Counts
 - Total Software Requirements (3.3.1.1)
 - New Software Requirements (3.3.1.2)
 - Total External Interface Requirements (3.3.2.1)
 - New External Interface Requirements (3.3.2.2)
 - Requirements Volatility (3.3.3)
- Total Delivered Code Count (3.3.4)
 - New Code* (3.3.4.1)
 - Reused With Modifications* (3.3.4.1.1)
 - Reused Without Modifications* (3.3.4.1.2)
 - Carryover Code** (3.3.4.1.3)
 - Auto-generated Code** (3.3.4.1.4)
 - Subcontractor-Developed Code ** (3.3.4.1.5)
 - Counting Convention (3.3.4.2)
- Comments (3.3.5)

* Can be tailored

** Mandatory



Code Size Example

OSD CAPE

		Build 1 Complete	Build 2 Complete	Build 3 Complete	Contract Complete
New Code	Human Generated	1,000	0	2,500	3,500
	Auto Generated	0	500	2,500	3,000
External Reused	With Modification	5,000	15,000	500	20,500
	Without Modification	3,000	0	2,000	5,000
Carryover Code from Previous Build	With Modification	0	0	12,250	N/A
	Without Modification	0	9,000	12,250	N/A
Total Delivered Code		9,000	24,500	32,000	32,000



Tailoring Restrictions*

OSD CAPE

- Contractors must ensure that their code partitions
 - Do not double count
 - When summed, reflect total delivered size
- Equivalent New Source Lines of Code (ESLOC) and Delivered Source Lines of Code (DSLOC) are not permitted as primary sizing metrics
- Alternative sizing metrics (such as Function Points) are permitted, but must be used as a consistent measure between the Initial Developer Report and the Final Developer Report

* DID Sections 3.3.4.1 and 3.3.4.2



Resource and Schedule

OSD CAPE

- Provides information on the amount of effort expended and the schedule length of development
- Effort must be reported in staff-hours (3.4.1)
- Effort must be partitioned into a set of activities (3.4.1)
 - (Example) Software Requirements Analysis
 - (Example) Software Architecture and Detailed Design
 - (Example) Software Coding and Unit Testing
 - (Example) Software Integration
 - (Example) Software Qualification Testing
 - (Example) System/Software Integration
 - (Example) System/Software Qualification Testing
 - (Example) Software Quality Assurance
 - (Example) Software Configuration Management
 - (Example) Software Program Management
 - Other software support activities (Examples: data, process improvement, IV&V, problem resolution)
- For each SW activity reported the contractor must provide:
 - CSDR WBS Element reference (3.4.2)
 - Start Month (3.4.4)
 - End Month (3.4.4)
 - Total Hours Prime Contractor Only (3.4.1)
 - Total Hours All Other Subcontractors (3.4.3)
- Note: It is possible that certain SW product elements do not contain a complete set of software development activities



Mapping SW Activities to WBS

OSD CAPE

- The DID requires contractors to show where their software development activities map to in the CSDR WBS
- Suppose
 - Contractor is preparing an SRDR for a product element called “HW/SW CI #1”
 - SRDR will reflect actuals for Build 1 complete



Mapping SW Activities to the WBS

OSD CAPE

HW/SW CI #1

Preliminary Design

Detailed Design

Coding

Unit Test

SW Acceptance Test

HW/SW Integration & Test

- 1.0 Electronic/Automated Software System
 - 1.1 Prime Mission Product (PMP)
 - 1.1.1 HW/SW CI #1
 - 1.1.2 HW/SW CI #2
 - 1.1.3 PMP Applications Software
 - 1.1.4 PMP System Software
 - 1.1.5 Integration, Assembly, Test and Checkout
 - 1.2 Platform Integration
 - 1.3 Systems Engineering/Program Management
 - 1.4 System Test and Evaluation
 - 1.4.1 Development Test and Evaluation
 - 1.4.2 Operational Test and Evaluation
 - 1.4.3 Mock-ups/System Integration Labs (SILs)
 - 1.4.4 Test and Evaluation Support
 - 1.4.5 Test Facilities
 - 1.5 Training
 - 1.5.1 Equipment
 - 1.5.2 Services
 - 1.5.3 Facilities
 - 1.6 Data
 - 1.6.1 Technical Publications
 - 1.6.2 Engineering Data
 - 1.6.3 Management Data
 - 1.6.4 Support Data
 - 1.6.5 Data Depository
 - 1.7 Peculiar Support Equipment
 - 1.7.1 Test and Measurement Equipment
 - 1.7.2 Support and Handling Equipment
 - 1.8 Common Support Equipment
 - 1.8.1 Test and Measurement Equipment
 - 1.8.2 Support and Handling Equipment
 - 1.9 Operational/Site Activation
 - 1.9.1 System Assembly, Installation and Checkout on Site
 - 1.9.2 Contractor Technical Support
 - 1.9.3 Site Construction
 - 1.9.4 Site/Ship/Vehicle Conversion
 - 1.10 Industrial Facilities
 - 1.10.1 Construction/Conversion/Expansion
 - 1.10.2 Equipment Acquisition or Modernization
 - 1.10.3 Maintenance (Industrial Facilities)
 - 1.11 Initial Spares and Repair Parts

When the gov't analyst reviews this element, they know it only contains a portion of the complete software development activities that comprise total software development

On the SRDR, each SW activity reported for HW/SW CI #1 maps to WBS 1.1.1



Remaining SW Activities

OSD CAPE

- What about the other software development activities?
- SW Activities for HW/SW CIs #1 & 2 would be reported on **separate SRDRs**
- The other activities could be accounted in the **WBS Element 1.0 SRDR**

Software Requirements Analysis

HW/SW CI #1

Preliminary Design
Detailed Design
Coding
Unit Test
SW Acceptance Test
HW/SW Integration & Test

HW/SW CI #2

Preliminary Design
Detailed Design
Coding
Unit Test
SW Acceptance Test
HW/SW Integration & Test

System Integration & Test

System Certification Test & Evaluation

Formal Qualification Test

SW Program Mgt

SW Quality Assurance

SW Process Improvement

SW Configuration Mgt

SW Data



SRDR for WBS Element 1.0

OSD CAPE

- Captures all software development including any elements that do not have their own SRDR
- Captures software development activities that the contractor does not account for at the software configuration item level

Complete Mapping Example

OSD CAPE



WBS 1.0 SRDR

Software Requirements Analysis

HW/SW CI #1

Preliminary Design

Detailed Design

Coding

Unit Test

SW Acceptance Test

HW/SW Integration & Test

WBS 1.1.1
(Separate SRDR)

HW/SW CI #2

Preliminary Design

Detailed Design

Coding

Unit Test

SW Acceptance Test

HW/SW Integration & Test

WBS 1.1.2
(Separate SRDR)

System Integration & Test

System Certification Test & Evaluation

Formal Qualification Test

SW Program Mgt

SW Quality Assurance

SW Process Improvement

SW Configuration Mgt

SW Data

1.0 Electronic/Automated Software System

1.1 Prime Mission Product (PMP)

1.1.1 HW/SW CI #1

1.1.2 HW/SW CI #2

1.1.3 PMP Applications Software

1.1.4 PMP System Software

1.1.5 Integration, Assembly, Test and Checkout

1.2 Platform Integration

1.3 Systems Engineering/Program Management

1.4 System Test and Evaluation

1.4.1 Development Test and Evaluation

1.4.2 Operational Test and Evaluation

1.4.3 Mock-ups/System Integration Labs (SILs)

1.4.4 Test and Evaluation Support

1.4.5 Test Facilities

1.5 Training

1.5.1 Equipment

1.5.2 Services

1.5.3 Facilities

1.6 Data

1.6.1 Technical Publications

1.6.2 Engineering Data

1.6.3 Management Data

1.6.4 Support Data

1.6.5 Data Depository

1.7 Peculiar Support Equipment

1.7.1 Test and Measurement Equipment

1.7.2 Support and Handling Equipment

1.8 Common Support Equipment

1.8.1 Test and Measurement Equipment

1.8.2 Support and Handling Equipment

1.9 Operational/Site Activation

1.9.1 System Assembly, Installation and Checkout on Site

1.9.2 Contractor Technical Support

1.9.3 Site Construction

1.9.4 Site/Ship/Vehicle Conversion

1.10 Industrial Facilities

1.10.1 Construction/Conversion/Expansion

1.10.2 Equipment Acquisition or Modernization

1.10.3 Maintenance (Industrial Facilities)

1.11 Initial Spares and Repair Parts



Reporting Sub-Contractor Effort

OSD CAPE

- DID Section 3.4.3 requires contractors to report (separately) the combined software development effort of all their sub-contractors
 - But the DID does not require primes to report effort discretely by sub-contractor
- If the details aren't known (i.e. prime does not know sub's effort by activity), then the prime must report the total effort and identify what activities are included in the total effort in the SRDR Data Dictionary



Example for HW/SW CI #1

OSD CAPE

Prime's SRDR

Activity	Maps to WBS	Total Effort (Prime)	Total Effort (All other sub-ctrs)
Preliminary Design	1.1.1	1,234	X
Detailed Design	1.1.1	5,678	X
Coding	1.1.1	9,101	X
Unit Test	1.1.1	12,131	X
SW Acceptance Test	1.1.1	13,145	X
HW/SW Integration & Test	1.1.1	15,167	
Total		56,456	32,767

X = Included in total

Note: Sub-contractor's effort also included SW PM, CM, QA, and data

Prime's SRDR Dictionary: "The sub-contractor did not report effort by software development activity. The total sub-contractor development effort includes Preliminary Design, Detailed Design, Coding, Unit Test, SW Acceptance Test, and SW PM/QA/CM/Data"



Other SRDR Data Elements

OSD CAPE

- **SRDR Product Quality Reporting*** (3.5)
 - Number of Defects Discovered (3.5.1.1)
 - Number of Defects Removed (3.5.1.2)
 - Comments (3.5.1.3)

* Optional for Initial Developer Report



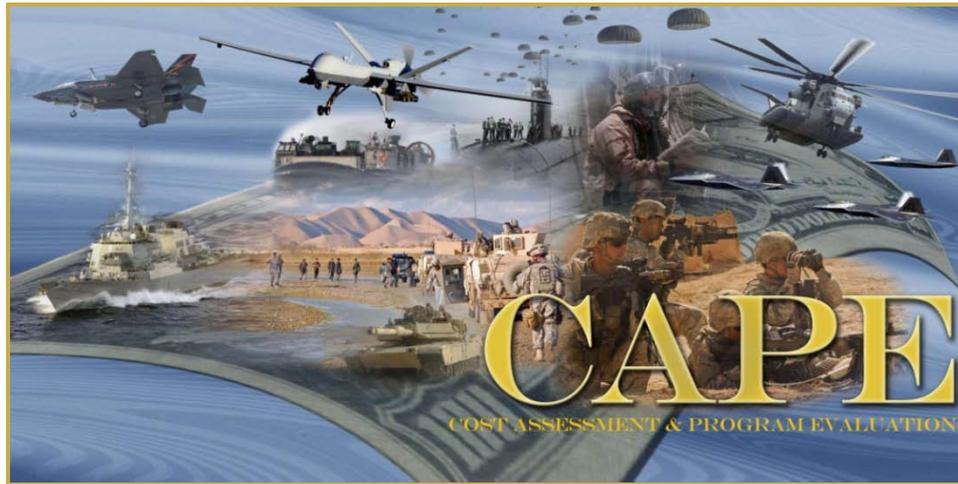
Optional Data Elements

OSD CAPE

- All data elements identified in the DID are mandatory except:
 - 3.2.4.2 COTS/GOTS SW Integration Effort
 - 3.3.4.3 SW Size by programming language
 - 3.3.4.4 Standardized Code Counting*
- Optional elements are invoked via instructions in the remarks section of the contract plan and in the contract CDRL
- Remember: The DID prescribes the data elements, but NOT the manner in which the data should be presented

* Applies only to DI-MGMT-81740

SRDR Data Dictionary Requirements





What is the SRDR Data Dictionary?

OSD CAPE

- A document which explains data definitions and any details required to correctly interpret the information provided in the SRDR
- The dictionary can be a separate document file or it can be embedded within the SRDR itself (example: A separate dictionary tab within an SRDR Excel file)
- Every SRDR submission must be accompanied by a SRDR data dictionary
- **Failure to submit an adequate dictionary will result in a rejection of the entire SRDR submission.**



Data Dictionary Requirements

OSD CAPE

- SRDR data dictionary requirements are embedded throughout the DID
- Add'l requirements include:
 - 3.6.1 Experience Levels
 - 3.6.2 Software Size Definitions
 - 3.6.3 Software Size Categories
 - 3.6.4 Peak Staffing
 - 3.6.5 Requirements Count (Internal)
 - 3.6.6 SW Requirements Count (External)
 - 3.6.7 Requirements Volatility
 - 3.6.8 Software Development Activities
 - 3.6.9 Software Product Quality Reporting
 - 3.6.10 Comments

Pay closer attention to items in red. These items have been troublesome for contractors