

ICEAA 2018

# Traveling the Path of DCARC, CSDR, and the Agile ERP SRDR

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# DCARC – Defense Cost and Resource Center

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## Primary Mission Goal -

- Collect Major Defense Acquisition Program (MDAP) and Major automated Information System (MAIS) cost and software resource data and provide secure, on-line, access to CSDR and EV reports to DoD Cost analysts

## Objectives

- Cost collection, planning, and execution of the CSDR process and the EV Central Repository
- Make access to CCDR data readily available by the DCARC to DoD government cost analysts, and sponsored support contractors, who are registered users.
- Serve as the point of contact for industry, government analysts, and Program Offices to facilitate Cost and Software Data Reporting.

## DCARC Facilitates the Strategic Collection of Data



# DCARC Purpose

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DCARC centrally manages the CCDR requirement for the entire DoD Acquisition community.

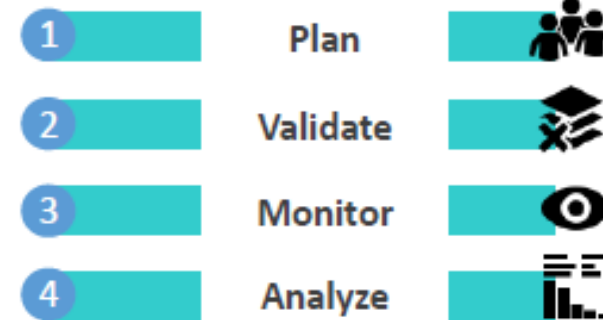
- Also DoD's agent for the collection, storage, and distribution of Earned Value Management (EVM) reports.
- OSD CAPE owns CSDR policy
- PARCA owns Earned Value policy

CSDR – Cost and Software Data Report

- CCDR – Contractor Cost Data Report
- SRDR – Software Resource Data Report

DCARC Knowledge Portal

- Central Data Repository
- Submit-Review Website
- cPet – CSDR Planning and Execution Tool



Some of the detailed information is borrowed from CAPE training slides.



# Policy and Applicability

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## For contracts greater than \$50M (TY)

- Contractor Cost Data Report (CCDR) required when –
  - All major contracts and subcontracts, regardless of contract type, for ACAT I and IA programs and pre-MDAP and pre-MAIS programs subsequent to Milestone A approval, valued at more than \$50 million (then-year dollars).
- Software Resources Data Report (SRDR) required when –
  - All major contracts and subcontracts, regardless of contract type, for contractors developing or 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 \$20 million (then-year dollars).

## For contracts between \$20M-\$50M (TY)

- Contractor Cost Data Report (CCDR) required when –
  - The CCDR requirement on high-risk or high-technical-interest contracts priced between \$20 million and \$50 million is left to the discretion of the DoD Program Manager and/or the Deputy Director, Cost Assessment (DDCA).
- Software Resources Data Report (SRDR) required when –
  - Same as above

## For contracts less than \$20M (TY)

- CCDR not required
- Software Resources Data Report (SRDR) required when –
  - The SRDR requirement on high-risk or high-technical-interest contracts priced below \$20 million is left to the discretion of the DoD Program Manager and/or the DDCA.

# CSDR – Cost and Software Data Report

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The OSD DDCA (Deputy Director, Cost Assessment), under the authority, direction, and control of the Director, Cost Assessment and Program Evaluation (CAPE), is responsible for establishing CSDR procedures and processing requirements for administering all acquisition category (ACAT) IAM, IAC, IC, and ID programs.

The Directors, DoD Component cost centers, shall ensure that the CSDR system is implemented.

CSDR is the DoD system for collecting actual costs and software data and related business data. The resulting repository serves as the primary contract cost and software data repository for most DoD resource analysis efforts, including cost database development, applied cost estimating, cost research, program reviews, analysis of alternatives (AoA), and life cycle cost estimates.



CDDR is the Contractor Cost Data Report

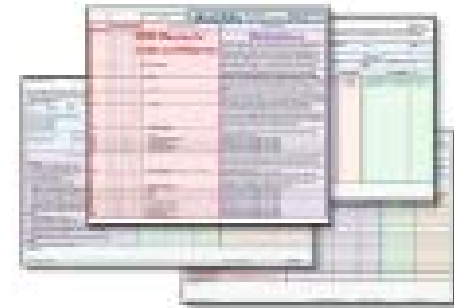
SRDR is the Software Resources Data Report

# Several Types of CSDRs

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## CSDR data collected today

- DD 2794 - CSDR Plan and Co-Plan
- CWBS - Contract Work Breakdown Structure Dictionary
- DD 1921 - Cost Data Summary Report
- DD 1921-1 - Functional Cost-Hour Report
- DD 1921-2 - Progress Curve Report
- DD 1921-3 - Contractor Business Data Report
- DD 1921-4 - Contractor Logistics & Support (CLS) Detail Report
- DD 1921-5 - Sustainment Report
- DD 1921-T - Technical Data Report (new)
- DD 1921-Q - Quantity Data Report (new)
- SRDR - Software Resource Data Report
- FlexFiles - Excel file for collecting contractor's financial data mapped to the 881D structure (new)



# CSDR System Requirements

REQUIRED REPORT	WHEN REQUIRED	SOURCE
Contractor Cost Data Report (CCDR)	<ul style="list-style-type: none"> <li>All major contracts<sup>1</sup> and subcontracts, regardless of contract type, for ACAT I and IA programs and pre-MDAP and pre-MAIS programs subsequent to Milestone A approval, valued at more than \$50 million<sup>2</sup> (then-year dollars). Reporting is continued even if a program has been downgraded from an ACAT I or IA, unless waived by DCAPE.</li> <li>Not required for contracts priced below \$20 million (then-year dollars).</li> <li>The CCDR requirement on high-risk or high-technical-interest contracts priced between \$20 million and \$50 million is left to the discretion of the DoD Program Manager and/or the Deputy Director, Cost Assessment (DDCA).</li> <li>Required for major components (i.e., government furnished equipment) of an ACAT I program that are managed by the Services as ACAT II or ACAT III, and if the contract value exceeds \$50 million or if determined to be a high-risk or high-technical-interest contract priced between \$20 million and \$50 million by the Program Manager and/or the DDCA.</li> <li>Not required under the following conditions, provided the DoD Program Manager requests and obtains approval for a reporting waiver from the DDCA: procurement of commercial systems or procurement of non-commercial systems bought under competitively-awarded firm fixed-price contracts, as long as competitive conditions continue to exist.</li> </ul>	DoD 5000.04-M-1 (Reference (at)) This instruction
Software Resources Data Report (SRDR)	<ul style="list-style-type: none"> <li>All major contracts<sup>1</sup> and subcontracts, regardless of contract type, for contractors developing or 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 \$20 million (then-year dollars).</li> <li>The SRDR requirement on high-risk or high-technical-interest contracts priced below \$20 million is left to the discretion of the DoD Program Manager and/or the DDCA.</li> </ul>	DoD 5000.04-M-1 This instruction
Contractor Business Data Report	<ul style="list-style-type: none"> <li>Required for all contractor business entities (e.g., plant, site, or business unit) responsible for contracts with CSDR requirements.</li> </ul>	DoD 5000.04-M-1
Contractor Sustainment Report	<ul style="list-style-type: none"> <li>All major contracts<sup>1</sup> and subcontracts, regardless of contract type, valued at more than \$50 million<sup>2</sup> (then-year dollars).</li> </ul>	SEC. 832 of P.L. 112-81 (Reference (v)) DoD 5000.04-M-1
<p>Notes:</p> <ol style="list-style-type: none"> <li>For CSDR purposes, the term "contract" (or "subcontract") may refer to the entire standalone contract, to a specific task or delivery order, to a series of tasks or delivery orders, to a contract line item number, or to a series of line item numbers within a contract. The intent is to capture data on contractual efforts necessary for cost estimating purposes irrespective of the particular contract vehicle used. All contracts for the procurement of end items, software, or services to support the acquisition of MDAP and MAIS programs (or ACAT II and III programs which meet the above thresholds) must include the Data Item Descriptions (DIDs) and Contract Data Requirements Lists necessary for the reporting of CSDR data.</li> <li>For CSDR purposes, contract value will represent the estimated price at contract completion (i.e., initial contract award plus all expected authorized contract changes) and be based on the assumption that all contract options will be exercised.</li> <li>CSDR is further discussed in section 4 of Enclosure 10.</li> </ol>		

Table from 5000.02



# Sample Standard Co-Plan

## Co-Plan

OSD CAPE

WBS RE	Y	PORTS REQUIRED (if applicable)		CCDR		EVM Reporting: <input checked="" type="checkbox"/>	
		DD 1921-3 (CBDR): <input checked="" type="checkbox"/>		DD 1921-1 / 1921-5 EAC: <input checked="" type="checkbox"/>		g. SRDR FORMATS	h. IPMR FORMAT 1
		b. DD 1921 (CDSR)	c. DD 1921-1 (FCHR)	d. DD 1921-2 (PCR)	e. DD 1921-5 (SFCHR)		
Missile System		X	X			X	X
Air Vehicle		X	X	X		X	X
Guidance	X	X	X	X			
Guidance Integration, Assembly, Test and	X	X					
Dome Assembly	X	X					
Seeker Assemblies (IR Seeker)	X	X					
Focal Plane Array	X	X					
Optics	X	X					
Cooling	X	X					
Gimbal	X	X					
Guidance Software Release	X	X	X			X	
Guidance Software Release	X	X	X			X	
Program Management	X	X	X				X
Software Program Management	X	X	X			X	
Other Program Management 2	X	X					
Data	X	X	X				X
Data Rights	X	X					
Data Rights 1...n (Specify)	X	X					
Data Deliverables	X	X					
Data Deliverables 1...n (Specify)	X	X					
Data Depository	X	X					
Rate Tooling	X	X	X				
Rate Tooling by End Item/Subsystem 1...n (Specify)	X	X					
Warranty	X	X	X				
Warranty by End Item/Subsystem 1...n (Specify)	X	X					

Lower-level WBS/CRS Extensions:  
 ➤ EAC not required at lower levels  
 ➤ Harmonized with Tech Data and Quantity

CSDR Software elements  
 CSDR Common elements harmonized with SDRR

Data Extension: Focused Sub-elements

Rate Tooling Extension  
 Warranty Extension

IPMR Standard consistency at Level 3

FCHR and PCR at select elements of interest

MIL-STD-881C COMPLIANCE CONFIRMED BY PARCA



# CWIPT

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## CWIPT – Cost Working-Group Integrated Product Team

- CSDR development/implementation
- Contractor CSDRs and appropriate Sub-Contractor CSDRs
- Establish the CWIPT at least 12 months before the OIPT milestone review.

## Who are the stakeholders?

- OUSD AT&L
- Office of DDCA
- Component Cost Center
- PEO Office
- PM Office

## Who should be in the CSDR process?

- DCARC - maintain communication from initial setup to final reports
- PMO cost analysts
- PMO EVM Specialist and Technical SMEs as necessary
- Contractors providing the CSDR data, also as necessary
- PEO and Component Cost Center analysts

**Collaboration is the key to success**

**CWIPT acts as the advisor to the PM and the CAPE Chair**

**Reconvene the WIPT as necessary as CSDR change requests arise**

# Contract Vehicle to Collect CCDR and SRDR data?

CSDR (both CCDR and SRDR) data is collected and stored in a central repository, the Defense Acquisition Automated Cost Information Management System (DACIMS).

## Pre-RFP to contract award

- Incorporating CSDR plans and requirements in the RFP
  - Initial Plan drafted
  - DCARC/CAPE/PARCA review plan
  - CWIPT approves
  - Service cost center reviews
  - DCARC/PARCA directors review/approve
  - Disseminate to the program office
  - Disseminate to the contractors (RFP release)
  - Contract Award

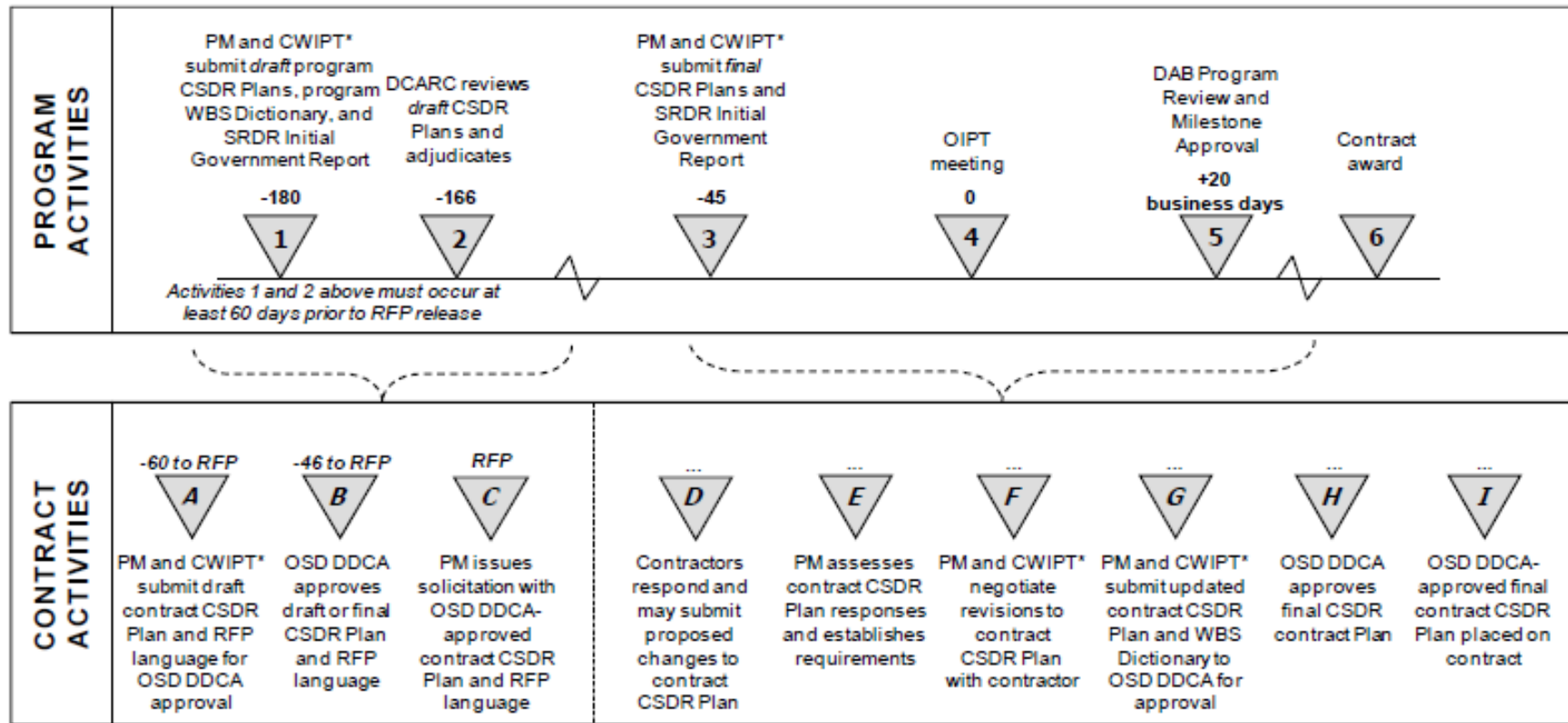
**If possible, It is critical to start Pre-RFP**

CDRLS, DIDs, MIL-STD-881D, DoDI 5000.02, DoDI 5000.3, DoD 5000.04-M-1, DoD 5000.75

**Data collections will cost \$\$\$ - Advanced Planning is required**

# Timeline for Pre-RFP CSDR Activities

*Notional timeline for preparing program and contract CSDR Plans*



# Timeline

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Sync in with CARD delivery timeline (180 days before the planned OIPT meeting) or 60 days before the first RFP release, whichever is earlier.

CSDR Initial reports are due within 60 days after IBR or 180 days after contract award

Interim reports

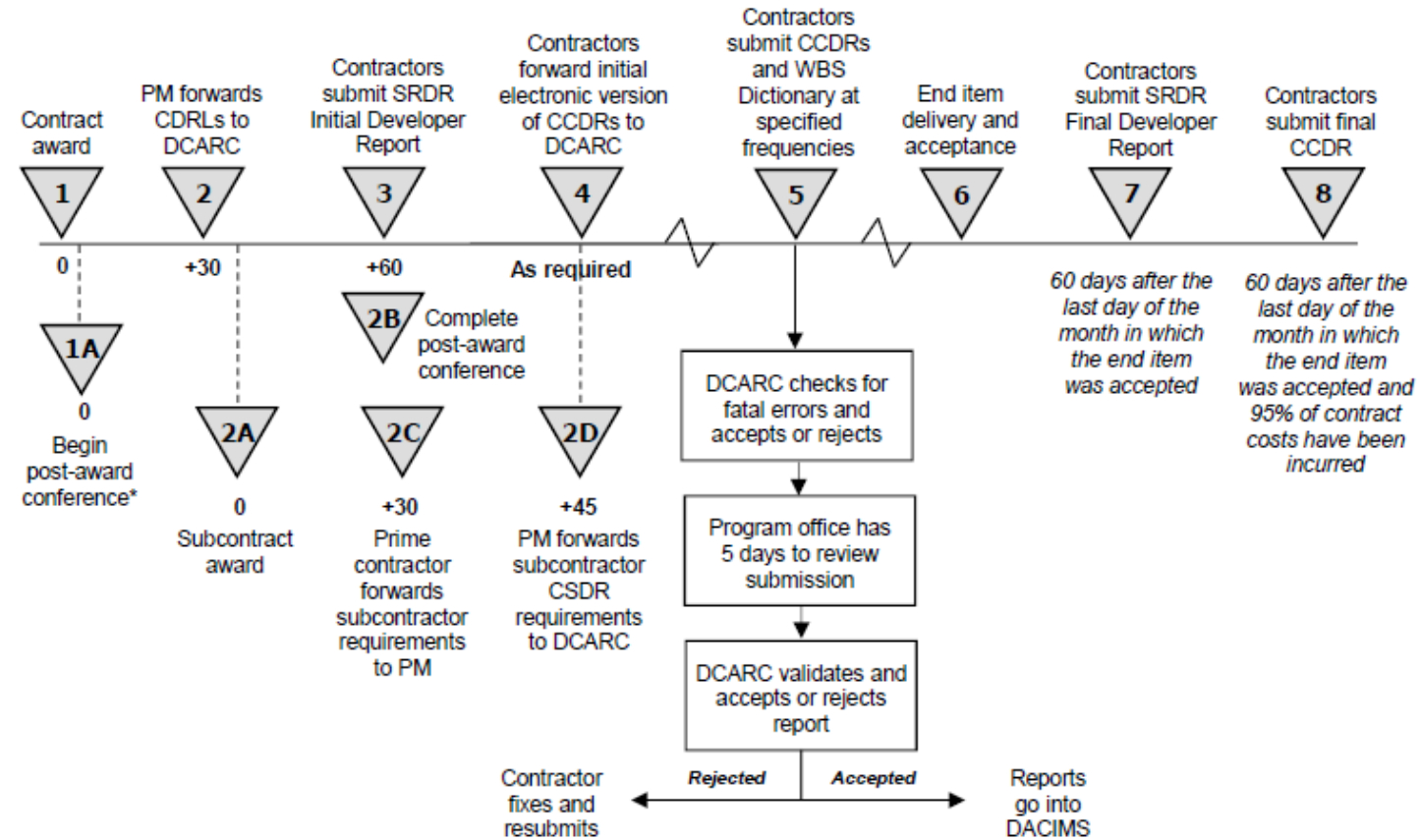
- Any time in the development or production efforts
- Examples to request interim reports: first prototype, EDU, major events, major milestones

CSDR Final Reports

- At contract completion

# Notional Timeline for Executing the CSDR

*Executing Contract CSDR Plans*





# 2015 Co-Plan Submission Events

OSD-CABE

## Timeline

14. CSDR SUBMISSION DATES			
Development			
a. SUBMISSION	b. FORM(S)	c. EVENT	d. REPORT TYPE
1	CWBS Dictionary	Contract Award (plus 12 months)	Initial
2	1921, 1921-1, 1921-2	Contract Award (plus 12 months)	Initial
3	SRDR Development	Contract Award (plus 12 months - Total Contract Estimate)	Initial
4	SRDR Development	Start of each Software Release	Initial
5	1921, 1921-1	Start of each Software Release (Coincident with SRDR Initial)	Initial
6	1921, 1921-1	System Requirements Review (SRR)	Interim
7	SRDR Development	System Requirements Review (SRR)	Interim
8	1921, 1921-1	Preliminary Design Review (PDR)	Interim
9	SRDR Development	Preliminary Design Review (PDR)	Interim
10	1921, 1921-1	Critical Design Review (CDR)	Interim
11	SRDR Development	Critical Design Review (CDR)	Interim
14. CSDR SUBMISSION DATES			
Production			
a. SUBMISSION	b. FORM(S)	c. EVENT	d. REPORT TYPE
1	CWBS Dictionary	Contract Award (plus 12 months)	Initial
2	1921, 1921-1, 1921-2	Contract Award (plus 12 months)	Initial
3	1921, 1921-1, 1921-2	Annual Report 1...n	Interim
4	CWBS Dictionary	Contract Completion (60 days from completion)	Final
5	1921, 1921-1, 1921-2	Contract Completion (60 days from completion)	Final
6	1921, 1921-1, 1921-2	Wildcard Report Request	
14. CSDR SUBMISSION DATES			
Sustainment			
a. SUBMISSION	b. FORM(S)	c. EVENT	d. REPORT TYPE
1	CWBS Dictionary	Contract Award (plus 12 months)	Initial
2	1921, 1921-5	Contract Award (plus 12 months)	Initial
3	SRDR Maintenance	Contract Award (Initial Estimate - Total Contract)	Initial
4	1921, 1921-5	Annual Report - Year 1...n (contract award +12 mo for AF and by Gov. FY for USN)	Interim
5	SRDR Maintenance	Annual Report - Year 1...n (contract award +12 mo for AF and by Gov. FY for USN)	Interim
6	SRDR Maintenance	Contract Completion	Final
7	1921, 1921-5	Contract Completion	Final
8	CWBS Dictionary	Contract Completion	Final

# EVM and CSDR Consistency

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*“To further advance the efficiency of data reporting, CAPE is working jointly with the acquisition community to develop a CSDR and Earned Value Management (EVM) Co-Plan. This effort aligns the CSDR and EVM data reporting structures. Aligning the two data structures will eliminate unnecessary detail from both systems, reduce the burden of reporting, and help contractors set up their financial accounting systems to more accurately and efficiently report data. The Co-Plan option is already available and its use is strongly encouraged.” DoD Cost Analysis Improvement Memo, January 9, 2017*

## Common WBS

- To the maximum extent possible, the Work Breakdown Structure (WBS) for program execution and the Contractor Reporting Structure (CRS) for cost reporting identified in the CSDR/EVM Co-Plan should be consistent with MIL-STD-881D (current version at time of award).
- The Government Program Office must give CAPE immediate notification of the Co-Plan drafting process.

# CSDR Plan or Co-Plan (DD Form 2794)

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The DD Form 2794 is the most important of all planning documents. This form summarizes all the planning for CSDR reporting and requires approval of the DDCA. CSDR plans consist of program plans and contract plans. CSDR plans form the basis for beginning CSDR compliance.

- Program CSDR Plan
  - includes Gov't Field Activities, PMO costs, and any effort below reporting threshold.
- Contact and subcontract CSDR Plans
  - Includes the prime contractor and sub-contractor and possibly any sub under a sub.

## Submission events and due dates

- All events and dates for the full program are included on the last page of DD Form 2794.

## Plan approval process

- Approval goes from the Program Office to DCARC, to the CSDR IPT, to DCARC Director, to CAPE, to DDCA then back to the Program Office for distribution to the prime contractor who distributes to the sub-contractors.

All Program, Contract, and Subcontract CSDR Plans are considered “living documents” that are updated as the program requirements, scope, and schedule evolve and change.

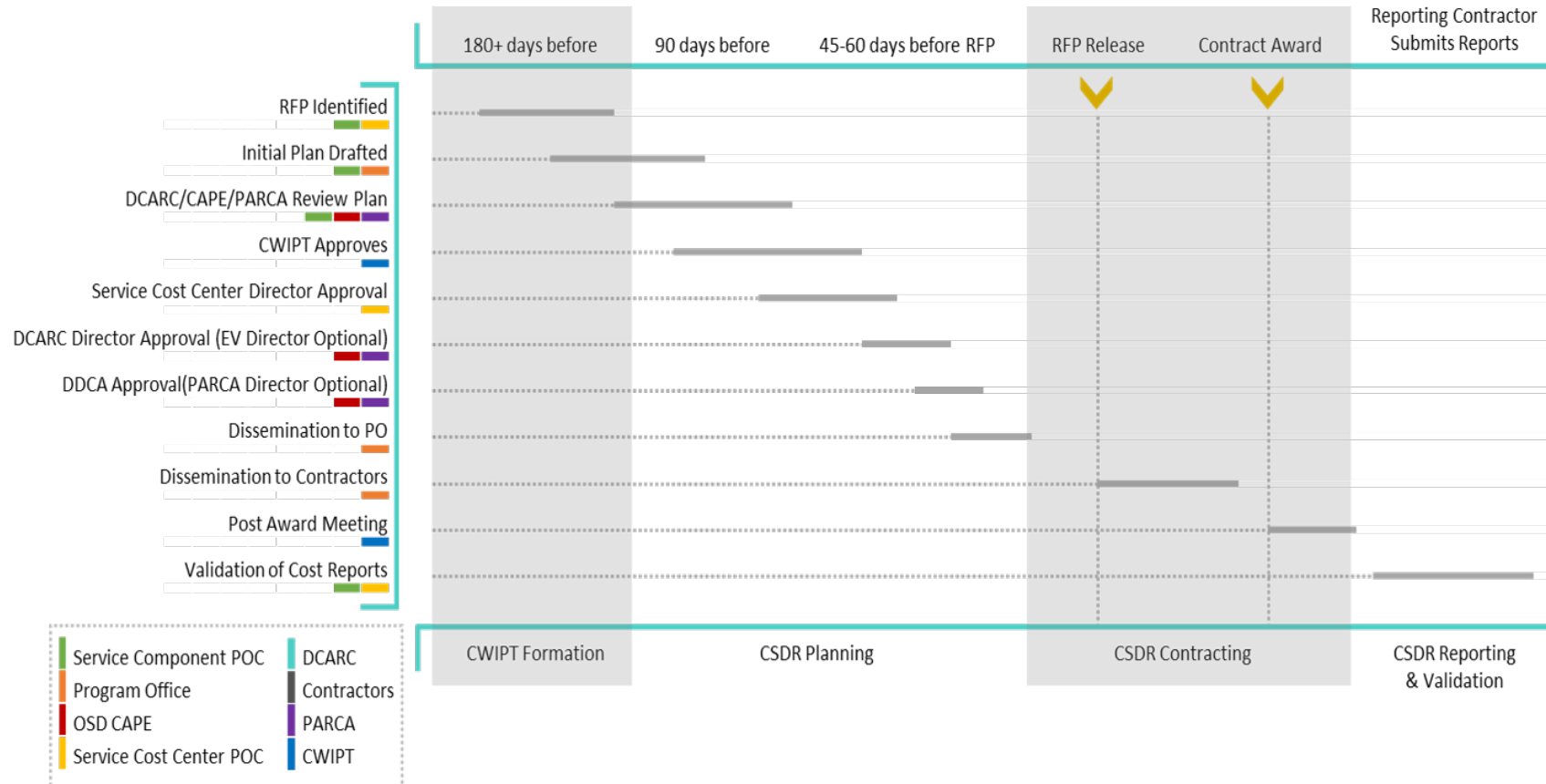


# EVM Requirements

REQUIREMENTS	WHEN REQUIRED <sup>1</sup>	SOURCE
<b>For Cost/Incentive Contracts<sup>2</sup> ≥ \$50 Million<sup>3</sup></b>		
- Compliance with EVM system guidelines in ANSI/EIA-748 <sup>4</sup>	At contract award and throughout contract performance	Part 7 of Office of Management and Budget (OMB) Circular A-11 (Reference (c)) This instruction
- EVM system formally validated and accepted by cognizant contracting officer	At contract award and throughout contract performance	
- Integrated Program Management Report (IPMR) (DI-MGMT-81861 <sup>5</sup> )	Monthly	
- Integrated Baseline Reviews	Within 180 calendar days after contract award, exercise of options, and major modifications	
<b>For Cost/Incentive Contracts<sup>2</sup> ≥ \$20 Million<sup>3</sup> but &lt; \$50 Million<sup>3</sup></b>		
- Compliance with EVM system guidelines in ANSI/EIA-748 <sup>4</sup> (no formal EVM system validation)	At contract award and throughout contract performance	Part 7 of OMB Circular A-11 This instruction
- IPMR (DI-MGMT-81861 <sup>5</sup> ) (tailoring of formats recommended)	Monthly	
- Integrated Baseline Reviews	Within 180 calendar days after contract award, exercise of options, and major modifications	
<b>For Cost/Incentive Contracts<sup>2</sup> &lt; \$20 Million<sup>3</sup></b>	At the discretion of the Program Manager based on cost-benefit analysis	Part 7 of OMB Circular A-11 This instruction
- IPMR, Format 6 (DI-MGMT-81861 <sup>5</sup> )	At the discretion of the Program Manager based on Government requirements	
<b>For Firm Fixed-Price Contracts<sup>2</sup> regardless of dollar value</b>	Limited Use—will be approved by the MDA based on a business case analysis	Part 7 of OMB Circular A-11 This instruction
- IPMR, Format 6 (DI-MGMT-81861 <sup>5</sup> )	At the discretion of the Program Manager based on Government requirements	
<p>Notes:</p> <p>1. EVM is required, as outlined in the table, unless the EVM requirement has been waived by the CAE per paragraph 6c in Enclosure 2.</p> <p>2. The term, "Contracts," includes contracts, subcontracts, intra-government work agreements, and other agreements. For Indefinite Delivery/Indefinite Quantity contracts, EVM will be applied to the individual task orders or group of related task orders in accordance with the requirements in this table. "Incentive" contracts include fixed-price incentive. EVM is required for Fixed-Price Incentive Fee development and integration contracts with measurable and discrete work scope. In cases where the work scope is not measurable and discrete, program offices should follow the process to obtain a DFARS deviation.</p> <p>3. Application thresholds are in then-year dollars.</p> <p>4. ANSI/EIA-748 = American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) Standard 748, Earned Value Management Systems (Reference (au)).</p> <p>5. DI-MGMT-81861 = DID: Integrated Program Management Report (Reference (av))</p> <p>a. If EVM is not required or a deviation is obtained, the IPMR should be used and tailored to obtain cost and/or schedule reporting when desired by the Government. For example, for full rate production contracts where EVM is not applicable, a tailored IPMR including a cost report showing actuals and a top-level schedule providing delivery dates of end products would be sufficient for Government management and oversight.</p> <p>b. Flow-down of the IPMR DID to the subcontractors is at the discretion of the program office.</p>		

Table from 5000.02

# CSDR Co-Plan Timeline



CSDR/EVM Co-Plan Process

# Program and Contract Plan Summary Table

	Program Plan	Contract Plan	Subcontract Plan
Responsible Parties	PM and CSDR IPT	PM, CSDR IPT, and contractor	PM, CSDR IPT, contractor, and subcontractor
Data Reporting Structure Level	To Level 3 or lower to show key subcontracts	To Level 3 per contract scope or lower for key/high-risk elements	To Level 3 per contract scope or lower for key/high-risk elements
Required Delivery	Prior to RFP, Prior to contract and subcontract plans	Prior to RFP release Prior to subcontract plan	Upon negotiation of subcontract
Cost Reporting	No	Yes	Yes
Software Reporting	No	Yes	Yes
Special End Notes	Program overview, contracting approach, quantity overview, and unique contractor instructions	Unique contractor instructions, 1921-3 requirement, accounting differences	Unique contractor instructions, 1921-3 requirement, accounting differences
Report Type/Frequency	Compilation of contract and subcontract plans	Specific to contract and its related direct reporting subcontracts	Specific to subcontract and consistent with prime contract plan requirements
Contract Number	Applies to all contracts for a specific acquisition phase	Single contract	Single contract
RDT	Program (including GFE)	Contract	Subcontract as applicable
Relationship among plans	One program plan may apply to many contract/subcontract plans	One contract plan may have many subcontract plans	Subcontract plan has one prime contractor. Subcontract plan may also require second tier subcontract plan(s)

# Resource Distribution Table (RDT)

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## Purpose of RDT

- Designed to provide an overview of the program's total or contract acquisition funding and indicates which elements are applicable to each firm
- Establishes an early tracking mechanism to ensure all appropriate reporting requirements are implemented
- Developed with input from the government program office

## Understand where program and contract dollars are being spent

The RDT is a planning document used by CWIPT members to understand how an MDAP's or MAIS's resources are to be distributed between government and industry organizations per acquisition phase.

- The RDT takes two forms
  - the first is the program plan RDT
  - the second is the contract plan RDT.
- A program plan RDT conveys planned resource expenditures for a particular acquisition phase and includes costs associated with the MDAP or MAIS government Program Office. It utilizes the program WBS.
- Conversely, a contract plan RDT is intended to convey planned resource expenditures on a contractual basis including all prime, subcontractor, and Government entities.

# RDT Development

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Developed with input from the government program office.

Identifies who is doing what work

- The RDT documents are the most important tools that the CWIPT has available to ensure that the CSDR requirement is applied to all organizations whose contract values exceed the CSDR reporting threshold dollar amounts.

Ensure all appropriate reporting requirements are implemented.

Total Program RDT Dollar Value reconciles with budget for given acquisition phase.

- Estimated dollar values are used in conjunction with the CSDR reporting dollar thresholds to determine which entities are subject to the CSDR requirement.

Total contract RDT dollar value should reconcile with contract value

# Program RDT/Contract RDT

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Program RDT - Identifies all government organizations, prime contracts, subcontracts, and Government Furnished Equipment (GFE) contracts and associated dollar values (total contract and SW effort). Covers:

- Program Office
- Prime Contracts
- Sub-contracts
- GFE
- Field Office



Contract RDT - Identifies a single prime contract, subcontracts, and associated dollar values (total contract and SW effort). Covers:

- Prime Contract
- Sub-contracts



# SRDR – Software Resources Data Reporting

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The SRDR system collects software metrics data to supplement the actual CCDR cost data to provide a better understanding and improved estimating of software intensive programs.

SRDR requirements are:

- All major contracts and subcontracts, regardless of contract type
- Contractors developing/producing software elements within ACAT IA, ACAT IC and ACAT ID programs
- For any element with a projected effort greater than \$20M

The DCARC is the OSD office responsible for administering the SRDR system.

Access to SRDR data is readily provided by the DCARC.

**The SRDR is a contract reporting requirement identified in Enclosure 4, DoDI5000.02, Table 4.**

# SRDR Reporting

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The SRDR collects software metrics data to supplement actual Contractor Cost Data Reporting (CCDR) cost data.

## Release Level Reporting

- The program office may choose to combine a set of smaller releases within a contract into a single release for reporting purposes.
- Separate software element developments within a single contract may be reported on separately or may be aggregated at the discretion of the DoD PM

## Initial and Final Reports

- Within 60 days of contract award, the software developer shall be required to submit an SRDR Initial Developer Report for the entire software product, customized as agreed to by the DoD PM.
- The software developer also shall be required to submit an SRDR Initial Developer Report for each deliverable software release or element within 60 days of the beginning of its development.
- In addition the software developer shall be required to submit an “as built” SRDR Final Developer Report, customized as agreed to by the CWIPT, within 60 days after delivery of each software release or element to the U.S. Government.



NOTE: If SLOC is the primary method of measurement, this form may not provide sufficient detail. Recommend using DI-MGMT-XXXXX and associated form for Release Map Development (not ERP application specific) to accommodate more detailed inputs by SLOC.

Release Map 3.3.5.1		Planned and Achieved Effort (By Feature per Epic) 3.3.5.2			Days per Release:	Days per Sprint:
Feature Identifier	Epic Identifier	Planned Story Points per Feature by Epic	Actual Story Points per Feature by Epic	Feature Hours	Summary Totals for This Release 3.3.5.3	
1	A	xx	xx	xx	Est.	Quantity Planned
2	B	xx	xx	xx		Quantity Actually Developed
3	C	xx	xx	xx	Total Features	
n	z				Total Epics	
					Total Story Points	
					Total Feature Hours	
					Total Sprints	

(NOTE: Insert rows as needed to account for all Features and Epics mapped to this Release.)

3L Other Measures: 3.3.5.4

Other Measures Name	Other Measures Count	Counting Standards or Guidelines
Other Measure 1	Other Measure 1 Count	Other Measure 1 Counting Standards or Guidelines
Other Measure 2	Other Measure 2 Count	Other Measure 2 Counting Standards or Guidelines

3B Comments on Product Alternative Sizing 3.3.5.5

Page 4 of 4

# NEW ERP SRDR Form

A new SRDR Data Item Description (DID), DI-MGMT-82035A, with an updated format for development, an updated format for maintenance, and a new format for Enterprise Resource Planning (ERP) programs was approved in November 2017.

- The new SRDR DID must be used for all new contracts and government efforts over \$20M (TY\$) development or over \$1M per year maintenance.
- DD Form 3026-1 (Format 1) provides the reporting format for software development efforts. Development SRDRs should align with acquisition Contract Cost Data Reports (CCDR) (DD Forms 1921 and 1921-1). Format 1 accommodates initial reports with estimated values, interim reports with a combination of estimated and actual values, and final reports with actual values.
- DD Form 3026-2 (Format 2) provides the reporting format for software maintenance efforts. Maintenance SRDRs should be accompanied by sustainment CCDRs (DD Forms 1921 and 1921-1 or 1921-5) at a comparable Work Breakdown Structure (WBS) level. Format 2 is to be submitted on an annual basis.
- DD Form 3026-3 (Format 3) provides the reporting format for ERP programs. ERP or Defense Business Systems are considered a special case of a software development effort. The reporting requirements outlined for Format 1, software development efforts, also apply to Format 3 unless noted otherwise in the SRDR DID.
- Each SRDR format contains a Part 1 and a Part 2. Part 1 includes identifying information as well as software size, schedule, and technical characteristics. Part 1 is required to be submitted in eXtensible Markup Language (XML) format when cPet functionality is available to generate an XML file from the completed Excel forms. Part 2 must be submitted in Excel format only and validated against companion CCDR submissions as noted above.

# New ERP SRDR

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## Adapting to software Agile development

- Epics, Features, and Story Points
  - What is reported?
  - At what level will the System Integrator, by contract, decide to provide reports?
- Useful metrics such as velocity
  - Determine velocity calculations at the appropriate level that consistent reliable data can be obtained from an Agile Manager tool.
  - Working with the System Integrator has been challenging trying to collect Agile data through their inputs to their Agile Management Tool.
- Mapping and conversion to RICE-FW
  - Army is requesting to provide RICE-FW counts along with the Agile data provide in the ERP SRDR.
  - Hasn't gone as well as expected from an Army DASA-CE review perspective.

# ERP Other Sizing Part 2

Enterprise Resource Planning Software Resources Data Report: Final Developer Report							
<b>D.2 - Product Alternative Size Reporting 3.3.5</b>							
<b>35. Function Point Measure (IFPUG): 3.3.5.1</b>							
Count Type (check one only) 3.3.5.1.1							
Enhancement Project FP Count <input type="checkbox"/>							
Application FP Count <input type="checkbox"/>							
Development Project FP Count <input type="checkbox"/>							
<b>Function Types (Count) 3.3.5.1.2</b>				<b>Low</b>	<b>Avg</b>	<b>High</b>	<b>Function Point (FP) Count</b>
<b>Data Functions</b>	Internal Logical Files (ILF)						0
	External Logical Files (ELF)						0
<b>Transactional Functions</b>	External Inquiries (EI)						0
	External Inputs (EI)						0
	External Outputs (EO)						0
				<b>Total Unadjusted FP 3.3.5.1.3</b>			0
				Value Adjustment Factor (VAF)			
				Adjusted FP Count (Unadjusted FP count * VAF)			0
<b>36. SW Lines of Code (Logical SLOC): 3.3.5.2</b>		<b>Aerospace Unified Code Counter Version: 3.3.5.2.1</b>			<b>Other Code Counter Name: 3.3.5.2.1</b>		
<b>Count by Code Category 3.3.5.2.2</b>		<b>SLOC Count</b>	<b>% DM</b>	<b>% CM</b>	<b>% IM</b>	<b>% AAF</b>	<b>% Reuse</b>
New Developed Code 3.3.5.2.2.1							
Auto Generated Code 3.3.5.2.2.1							
Modified/Adapted Code 3.3.5.2.2.2							
Deleted Code 3.3.5.2.2.3							
NOTE: If SLOC is the primary method of measurement, this form may not provide sufficient detail. Recommend using DI-MGMT-XXXXX and associated form for "General SW Development" (not ERP application specific) to accommodate more detailed inputs by SLOC.							

# ERP Other Sizing Part 2

Cont'd

NOTE: If SLOC is the primary method of measurement, this form may not provide sufficient detail. Recommend using DI-MGMT-XXXXX and associated form for "General SW Development" (not ERP application specific) to accommodate more detailed inputs by SLOC.

37. Agile Measures: <b>3.3.5.3</b>					Days per Release:	Days per Sprint:
Release Map <b>3.3.5.3.1</b>			Planned and Achieved Effort (by Feature per Epic) <b>3.3.5.3.2</b>		Summary Totals for This Release <b>3.3.5.3.3</b>	
Feature Identifier	Epic Identifier	Planned Story Points per Feature by Epic	Actual Story Points per Feature by Epic	Feature Hours		
1	A	xx	xx	xx	<u>Item</u>	<u>Quantity Planned</u>
2	B	xx	xx	xx	Total Features	
3	C	xx	xx	xx	Total Epics	
n	z				Total Story Points	
					Total Feature Hours	
					Total Sprints	
(NOTE: Insert rows as needed to account for all Features and Epics mapped to this Release.)						
38. Other Measures: <b>3.3.5.4</b>						
Other Measures Name		Other Measures Count	Counting Standards or Guidelines			
Other Measure 1		Other Measure 1 Count	Other Measure 1 Counting Standards or Guidelines			
Other Measure 2		Other Measure 2 Count	Other Measure 2 Counting Standards or Guidelines			
39. Comments on Product Alternative Sizing <b>3.3.5.5</b>						

# ERP SRDR DID (new)

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## [DoD Cost Analysis Data Improvement Memo Signed by Dr Morin 2017.01.09](#)

A new SRDR Data Item Description (DID), DI-MGMT-82035A, with an updated format for development, an updated format for maintenance, and a new format for Enterprise Resource Planning (ERP) programs was approved in November 2017 and is available in our DID & Form Table page (link is provided below). It replaces the 2016 version of the DID which superseded the 2011 Initial and Final SRDR DIDs. The SRDR DID must be used for all new contracts and government efforts over \$20M development or over \$1M per year maintenance. Contract data requirements lists (CDRLs) may be amended to implement the new DIDs for future software releases at the discretion of the Program Manager and Cost Working Integrated Product Team (CWIPT). Example SRDR CDRL language to address the new SRDR DID is available in our CDRL page (link is provided below).

# SRDR Forms

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Each SRDR format contains a Part 1 and a Part 2. Part 1 includes identifying information as well as software size, schedule, and technical characteristics. Part 1 is required to be submitted in eXtensible Markup Language (XML) format when cPet functionality is available to generate an XML file from the completed Excel forms. Part 2 must be submitted in Excel format only and validated against companion CCDR submissions as noted above. Until the cPet functionality is available to generate the XML format, both Part 1 and Part 2 must be submitted in Excel format.

- DD Form 3026-1 (Format 1) provides the reporting format for software development efforts. Development SRDRs should align with acquisition Contract Cost Data Reports (CCDR) (DD Forms 1921 and 1921-1). Format 1 accommodates initial reports with estimated values, interim reports with a combination of estimated and actual values, and final reports with actual values.
- DD Form 3026-2 (Format 2) provides the reporting format for software maintenance efforts. Maintenance SRDRs should be accompanied by sustainment CCDRs (DD Forms 1921 and 1921-1 or 1921-5) at a comparable Work Breakdown Structure (WBS) level. Format 2 is to be submitted on an annual basis.
- DD Form 3026-3 (Format 3) provides the reporting format for ERP programs. ERP or Defense Business Systems are considered a special case of a software development effort. The reporting requirements outlined for Format 1, software development efforts, also apply to Format 3 unless noted otherwise in the SRDR DID.

# SRDR Development Thresholds

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SRDR Development (to include ERP programs) reporting thresholds remain unchanged at \$20M, then year dollars.

- If a program either has previously qualified for SRDR development reporting or currently qualifies for CCDR sustainment reporting (i.e., total contract exceeding \$50M, then year dollars), and the total current annual software maintenance effort exceeds \$1M per year, then year dollars, then maintenance SRDRs are required.
- For maintenance SRDRs, do not include capability enhancement costs in the calculation if the capability enhancement is itself part of a designated ACAT I, II, or III program.
- These thresholds apply to both contractor and government efforts.
- Any phase of a program may use any of the forms associated with SRDRs, the CWIPT should consider the software effort environment and which form or forms best apply.

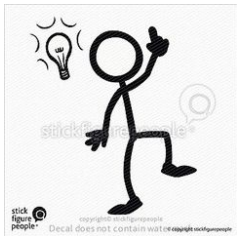


# IPPS-A Lessons Learned (1 of 3)

IPPS-A is an Army ACAT IAM program.

The CSDR process, working with the contractor, took longer than initially anticipated.

- The Co-Plan was written then revised, revised again, and revised again till a final submittal actually occurred almost one year later.
  - Need 2 plans: Program Plan and Contract Plan
- The data dictionary was just as difficult to get the contractor to finalize based on continued changes to the WBS which was to be used for both cost data collection and EVM data collection.
- There were challenges using both the cPet tool and in using the new flex file. Had to often ask for support/assistance in getting through the whole process.



IPPS-A was selected as the pilot project to be first to use the new ERP SRDR form.

- Difficulty getting initial Agile story points/features information from the contractor for the initial report.
- The actual Agile counts provided in the initial report changed dramatically as the program progressed.
- DASA-CE eventually requested to get a RICE-FW count to complement the Agile counts.





# IPPS-A Lessons Learned (2 of 3)

The whole CSDR process ended up taking more time.

- Getting the updates in correctly and then getting the appropriate individuals to look at them took time, much longer than you might think.
- Getting the voting completed was always a challenge.
  - Typically we had to make calls and ask for them to complete.
- It took more manual intervention than we had anticipated to make everything work correctly.
- Not as automatic as we thought the process was going to be – it was challenging.



The CSDR process with Agile Software Development

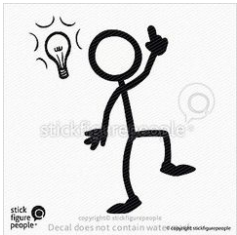
- Working with the data being provided by the System Integrator on contract has proven to be challenging.
- Data is inconsistent and reporting at different levels keeps changing between trying to map the IMS to the EVM data to the Agile data.
- Reporting the data has therefore been challenging trying to team the Government with the System Integrator for program success.



# IPPS-A Lessons Learned (3 of 3)

Updating the CSDR in cPET due to program changes.

- As the project grew over time, it became challenging to work with the System Integrator on getting the CSDR plans updated due to changes in the WBS.
- That put the program back to trying to get inputs accomplished, reviewing done by the members, and then final voting by the members.
- Again a tedious effort needing constant surveillance.
- Program Office needs to allow ample time to do the CSDR and SRDR closeout for final reports.
- Additional Release dates coming up in IPPS-A which means more CSDR report to produce.



More lessons learned to report out at the next ICEAA

# ICEAA 2018

## Contacts

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