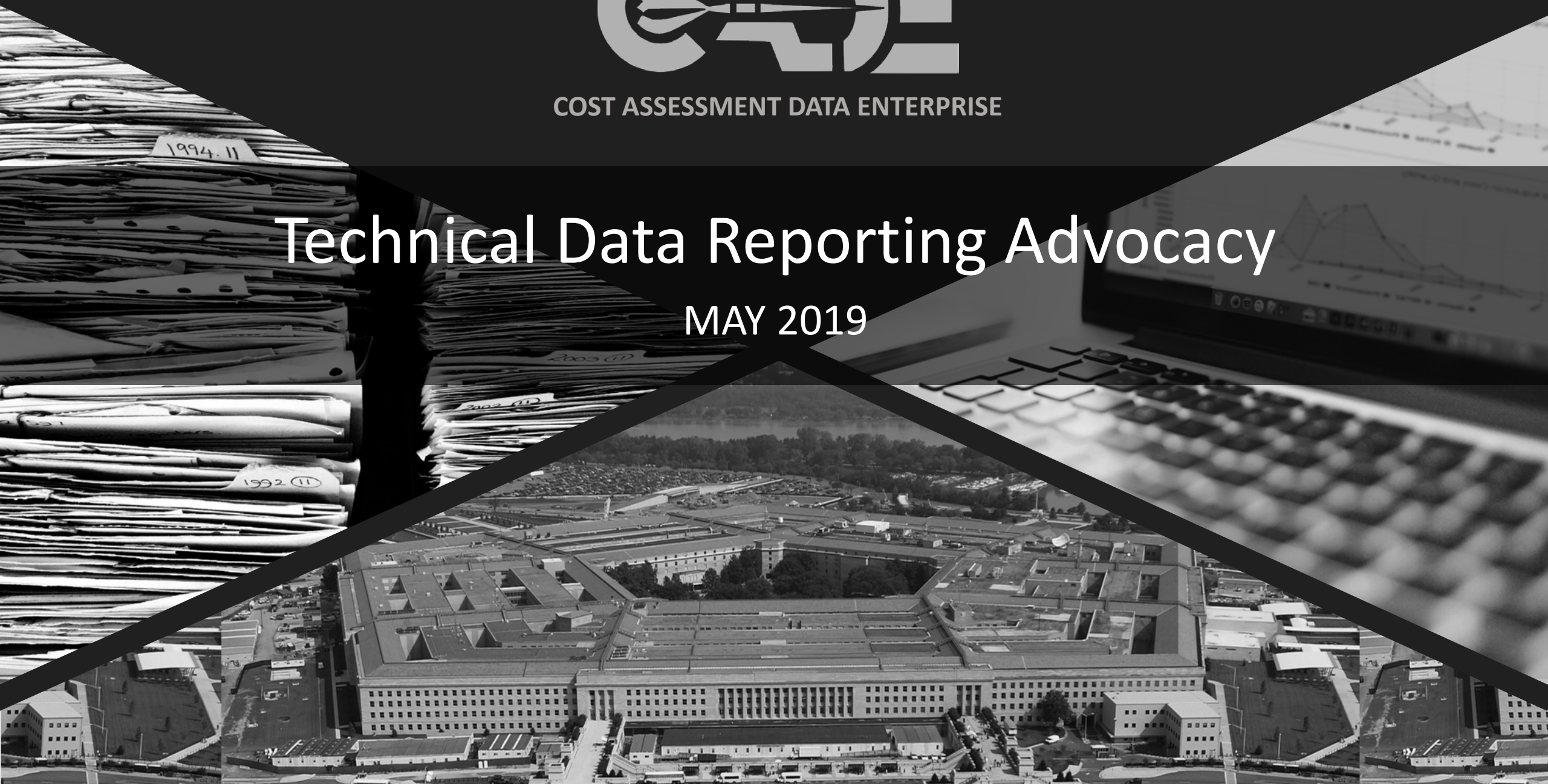




COST ASSESSMENT DATA ENTERPRISE

# Technical Data Reporting Advocacy

MAY 2019



# Technical Data Overview



## Tech Data Initiative:

- › Provides mechanism to systematically capture Tech Data on contracts
- › Complements DoD CARD process
- › Creates a common Tech Data Vocabulary
- › Defines core set of needed parameters
- › Leverages other Tech Data on contract

## Results:

- › **Tech Data Plan** reported via WBS
- › Common **taxonomy** for both CARD and TDR - consistent with Industry

- Technical data is an enduring cost analysis need
- Technical data tied to each 881D WBS element will add value to the cost data collected for this contract
- Estimating subsequent contracts on this program will use this technical data
- Estimating future programs using this program as a reference will use this technical data
- Obtaining technical data now as a contract deliverable avoids subsequent data calls to the contractor or program office

The Service Cost Center analyst is the voice of advocacy within the CWIPT for placing the Technical Data Report on contract

# Repeatable Tech Data Process



- ✓ Start with Core Parameters by Commodity & Phase
- ✓ Refine Contract-Specific Parameters using Technical Data Vocabulary Database
- ✓ Review other Contractual CDRL Requirements to Minimize Duplication
- ✓ Finalize Technical Data Reporting, DD 2794 Supplement & Submission Events
- ✓ Revise generic Technical Data CDRL (DD 1423) to Program specifics
- ✓ Participate in pre / post award conferences to Ensure Tech Data requirements are well understood

ITEM TYPE	SUBTYPE	PARAMETER NAME	UNIT OF MEASURE	Core by Phase		
				Dev	Prod	O&S
ElecBox		Clock Speed	Megahertz	X	X	
ElecBox		ASIC - Gate Count	Quantity	X	X	
ElecBox		FPGA - Gate Count	Quantity	X	X	
ElecBox		Transmitter Power Output - Peak	Watts	X	X	
ElecBox		Number of Receiver Channels	Quantity	X	X	
ElecBox		Type of Modulation	List	X	X	

## Standard CSDR Plans and CADE Technical Vocabulary

ElecBox	PhysicalElec	Weight - Structural	Pounds		X	
ElecBox	PhysicalElec	Weight - Electronics	Pounds		X	
ElecBox	Heritage	New Design	Percent	X		
ElecBox	Heritage	Technology Readiness Level (TRL)	List	X		
ElecBox	Identification	NSN	Name/Number		X	X
ElecBox	Operational	Maintenance Level	List		X	X
ElecBox	Operational	Mean Time Between Failure (MTBF)	Hours		X	X
ElecBox	Operational	Mean Time To Repair (MTTR)	Hours		X	X

TECHNICAL PARAMETER REQUIREMENTS						
27. WBS ELEMENT CODE	28. WBS ELEMENT NAME	29. ITEM TYPE	30. TECHNICAL PARAMETER			
			a. PARAMETER NAME	b. UNIT OF MEASURE	c. UNIT OF MEASURE QUALIFIER	d. REPEATABLE
1.2	Air Vehicle	Air Vehicle	Crew Size	Quantity		
1.2	Air Vehicle	Air Vehicle	Number of Engines	Quantity		
1.2	Air Vehicle	PhysicalStruc	Volume	Cubic Inches		
1.2	Air Vehicle	PhysicalStruc	Weight	Pounds		
1.2	Air Vehicle	PhysicalOther	Material Mix 1..n	Descriptor		
1.2.2	Airframe	Heritage	Predecessor System	Year		

## Contract CSDR Plan Technical Data Supplement

1.2.2.2	Fuselage	PhysicalStruc	Dimension - Description	Descriptor		
1.2.2.3	Wing	PhysicalOther	Material Mix 1..n	Descriptor		
1.2.2.3	Wing	Heritage	New Materials	List		
1.2.2.3	Wing	PhysicalStruc	Volume	Cubic Inches		
1.2.2.3	Wing	PhysicalStruc	Weight	Pounds		
1.2.2.4	Empennage	PhysicalOther	Material Mix 1..n	Descriptor		
1.2.2.4	Empennage	Heritage	New Materials	List		
1.2.2.4	Empennage	PhysicalStruc	Volume	Cubic Inches		
1.2.2.4	Empennage	PhysicalStruc	Weight	Pounds		
1.2.2.5	Nacelle	PhysicalOther	Material Mix 1..n	Descriptor		
1.2.2.5	Nacelle	Heritage	New Materials	List		
1.2.2.5	Nacelle	PhysicalStruc	Volume	Cubic Inches		
1.2.2.5	Nacelle	PhysicalStruc	Weight	Pounds		

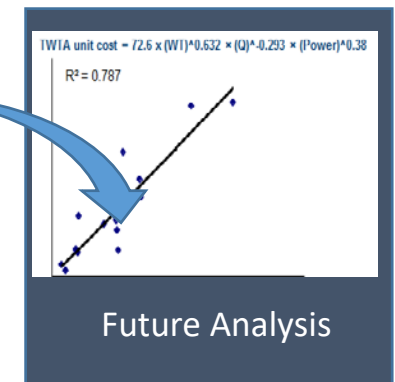
DD FORM 2794 (Page 4), TECHNICAL PARAMETER REQUIREMENTS, JUNE 2017 PREVIOUS EDITION IS OBSOLETE

Contractor Reports technical data by WBS element per plan

## Contractor TDR Submission

TECH: Parameters by Mapping ID									
Mapping ID	Item Type	Technical Parameter Name	Group Key	Value	Unit of Measure	Unit of Measure Qualifier	Estimate/Actual	Margin	Remarks
1.1	Air Vehicle	Combat Rate							
1.1	Air Vehicle	Absolute Rate							
1.1	Air Vehicle	Weight							
1.1.1.2	ElecBox	Clock Speed							
1.1.1.2	ElecBox	ASIC - Gate Count							
1.1.1.2	ElecBox	FPGA - Gate Count		24583	Quantity	Gates	Actual		
1.1.1.2	ElecBox	Volume				Cubic Feet	Actual		
1.1.1.2	ElecBox	Weight		20	Pounds		Actual		
1.1.1.2	ElecBox	Power - Maximum Consumption Rate		18	Watts		Actual		Bench Test Results May 2021
1.1.1.2	ElecBox	New Design		100	Percent		Actual		Abandoned reuse of prior design, TIM Jun 2021

Data-rich CADE Repository



Future Analysis

Over time, CADE cost data usefulness will be significantly enhanced