CHIEF DIGITAL AND AI OFFICEnted at the ICEAA 2023 Professional Development & Training Workshop - www.iceaophineerophin



#### Follow the Money in Government Estimates ICEAA 2023 Professional Development & Training Workshop Geoffrey Boals CDAO Cost Analyst





- Intro
- Problem Set
- Technique
- Additional Background
- Toolset
- Way forward

# Introduction



- The Department of Defense has made many changes to its financial and reporting systems that impact how the cost estimating community can perform its core duties in data collection.
- Previously existing barriers or roadblocks are being removed in place of centralized and automated processes to share data.
- Pathfinding the newly opened routes to the data repositories is the goal should be the goal of any future cost estimator
- Given parts of the puzzle, develop a set of techniques and practices to obtain data at a high quality for estimates



## **Data Problem 1**



- Data collection is a priority for any cost estimate and it is not always possible to get complete or accurate information from any one source
- During interviews with Acquisition professionals when asked to provide the Contract Number and Delivery Order Number from the standardized contract forms the answers received were not consistent.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE J		PAGE OF PAGES			10A. MOD. OF CONTRACT/ORDER NO.
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECTN	NO.(Ifapplicable)		· ^	
P0		SEE SCHEDULE						

SOLICITATION/CONTRACT		1. REQUISITION	ON NUMBER JLE	PAGE 1 OF 13		
2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NUMBER		5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE	
7. FOR SOLICITATION INFORMATION CALL:	a. NAME			b. TELEPHONE NUMBER (No Collect Calls)	8. OFFER DUE DATE/LOCAL TIME	

# **Data Problem 2**



- RDT&E development contracts can bundle multiple projects that are similar work a lot then award on a single CLIN
- Data collection is incomplete or missing critical pieces (details of project, scope, funding, timeline) to use as high-quality data cost data
  - Risk or error in cost estimating efforts is Higher
  - Lower-level project tracking based on the contract not feasible as reporting is at the CLIN level

UNIT PRICE

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT
0001		1	Lot
	JAIC Smart Sensor Autor	nomous ISR	

AMOUNT xx,xxx,xxx

## **Data Matrix**



- Using a Matrix below shows how you can take the data you have and start to add to the quality and verify with the financial system of record.
- During interviews and discussions with the project team the data gathered may be incorrect or have holes in the data
- By using the data cleaning and using the financial systems as a truth source cost estimators can refine the estimate to a more accurate result.

Reference ID	Common Contract Vehicle Name	Contract Number	Task Order Number	Contract Mod	<b>Requesition Number</b>	Support Agreement	BEGFY	APPN	<b>Budget Line</b>	<b>Object Class</b>	Invoice Number	<b>Obligation Amt</b>
1	Group1	GS35F386DA	AB1234567	Base	HC1085XXXXX	A2211-097-017-XXXXXX					ABC123	\$XXX
2	Group1	GS35F386DA	BC1234567	Mod 1	HC1085XXXXX	A2211-097-017-XXXXXX					DEF456	\$XXX
3	GroupB	AB12-F-20-5678	DE1234567	POOOXX								\$XXX
4	GroupC	DE1234567		A000XX		A211-097-XXX-XXXXXX						\$XXX
5	GroupD				TBD		2020	0100	4GTN	251		\$XXX
6	GroupD				HC0034XXXXX		2023	0400	0604123D8Z	251		\$XXX
7	GroupD				HC06423XXXXX		2023	0400	0604123D8Z	251		\$XXX
8	Group2						2018	0100	46TN	111		\$XXX

# Technique to improve data quality



- Look for the lower-level sub projects that make up the lot in the financial system not the contracts.
  - Funding by individual MIPRs or Purchase Requests for multiple projects may be separated from the lot and tracked.
  - Funding may be by multiple parties and not a single organization
  - Financial systems track obligations and expenditures at the funding document level
  - Funding documents require supporting documents such as IGCEs, statements of Work.
  - Specific projects funding and completion times can be determined from the funding document tracking and supplementary documents

# Approach to gather data



- Look for Historical Cost Data
  - "Historical Data are the backbone of a good estimate, They provide credibility, accuracy, and defensibility" (ICEAA)
    - No change if there is historical data from traditional sources use it!
- Build Data Matrix
  - · Look for outliers in the data set
  - Correct the outliers when possible
- Leverage the Federal Financial Systems your organization uses
  - Review the lower level funding documents for applicability
    - MIPR, PWS, IGCE, others
- Explore other sources
  - GSA public Government Wide Acquisition Contract Rates
  - Published Analysis or Models
    - SRDRs
    - CADE

# **Supplementary Data Gathering**



- Proposed steps to find data when traditional methods fail:
  - Review estimate for large lot RDT&E Contract Line-Item Number (CLIN) items
  - Attempt to break CLINS down into smaller efforts
  - Allocate the requirements and funds to the sub projects of the CLIN

#### Supplementary Data Sources:

- Support Agreement
  - Provide the programmatic scope of the approved work, labor rates, contract, POCs, and organizational data to improve the search for relevant data
  - Later the Support Agreements will be the check books for contract and MIPRs that will be the centralized tracking of obligations to see total expenditures from internal and external organizations
- Standard Line of Accounting (SLOA)
  - Provides insight as to the Purpose, Year, and limits of use for the funds used against a project and can be used to find similar expenditures that were not reported in interviews
- Financial System or Connected Dashboard
  - Tool to find the truth, does not rely on human memory or a project teams bias
  - Can shed light in overlooked or missed items in planning or budgeting

MILITA	RY INTER	DEPARTME	NTAL PUR	CHASE	REQUI	EST		1. PAGE 1	OF F	AGES
.F8C 3	8. CONTROL SYME	OL NO.	4. DATE PREPOR	mented a	5. MTCN Unique	Fund Do	A 20	123 Pro	Basic/A	
TO: SA Region of Pl treet Address http/State/Zip	М		1	8. FROM: Requestin Street Add City/State	g Agency tress			mber of origina	ator)	
		OT INCLUDED IN 1		E SUPPLY SUP	PORT PR	OGRAM A	ND REQU	RED INTERS	ERVICE	
SCREENING EM IO. (Federal s		AS NOT BEEN AC DESCRIPTION Inclature, specification		etc.)	QTY	UNIT		NTED NIT ICE	ESTIMATI TOTAL PRICE	
a		b	-		c	đ			1	
and task de -Time: Peri -For new -If task h -POP for -Client F -DUNS 1 -Statutor -Cantor -Cantor -Cantor -Categor Additional Ini -CRA State -SAF (Subj	order ID and/or d escription in ITS3 od of Performann v awards, can list as been awarded provided for (es Non-Severable : Non-Severable : Non-	ce of task (not fun "estimated" or "D L list POP for task COY2, 09/30/17- tasks not required me, 10 digit phone AAC for Requesti	d) the funds will Date of award + "." year funds are bo 09/29/18) IF provided on P e number, email a ing Agency II (Direct Cite) ed: 	be applied to X" months"" eing art B address			ind To sic + A	.mds. –		
0. SEE ATTACHED P		RY SCHEDULES, P FOR DISTRIBUTIO					IPPING	11	I. GRAND TO	TAL
2. TRANSPORTATION	_			13. MAIL INVO			vil be mad	e by)		
							OFFICE			
	TO COVER THE ES	TIMATED TOTAL P	RICE.			LOW, TH				
CRN APPROPRIAT Treasury Acco Symbol	00011010	8		LACCOUNTING CLASSIFICATION ACCOUNT AMOUNT Line of Accounting Used for IPAC Billing				NT		
5. AUTHORIZING OFF	ICER (Type name	and tite)	16. SIGNATU	RE			1	7. DATE Date Blo	ock 16 sign	ed
D Form 448, J	UN 72 (EG)		PREVIOUS EDI	TION IS OBSO	ETE.					





#### **Example MIPR:**

- Financial Systems may include two lines for accounting
  - LOA- Legacy
  - SLOA- Standard Required as of Oct 1, 2022
- Additional details may be found after block 15 from the financial system

### Example Text found in the notes or Block 9 from DAI:

Provides FY22 RDT&E Funding for the Project XYZ Contract Vehicle Technical Direction Letters (TDLs). The purpose of this requirement is to deliver industry standard, open architecture services and products (software and/or hardware) across the full spectrum of AI-enabled capabilities GT&C Number: A211-097-XXXX

The contract is severable and meets bona fide needs for the fiscal year. Contract PoP: 05/05/2022 - 05/04/2023 Funding PoP: 05/05/2022 - 09/30/2022

Funded Amount: \$X,XXX,XXX.XX Other Fee Amount: \$XX,XXX.XX Total Funded Amount: \$X,XXX,XXX.XX Technical POC: Joan Smith / Joan.smith.civ@mail.mil John Smith / john.smith@gsa.gov Financial POC: John Smith / john.smith.civ@mail.mil

### **Block 9- Item Description**



#### • Example Text found in the notes or Block 9 from DAI:

 Provides FY22 RDT&E Funding for the Project XYZ Contract Vehicle Technical Direction Letters (TDLs). The purpose of this requirement is to deliver industry standard, open architecture services and products (software and/or hardware) across the full spectrum of AI-enabled capabilities

#### GT&C Number: A211-097-XXXX

- The contract is severable and meets bona fide needs for the fiscal year.
- Contract PoP: 05/05/2022 05/04/2023
- Funding PoP: 05/05/2022 09/30/2022
- Funded Amount: \$X,XXX,XXX.XX
- Other Fee Amount: \$XX,XXX.XX
- Total Funded Amount: \$X,XXX,XXX.XX
- Technical POC: Joan Smith / Joan.smith.civ@mail.mil John Smith / john.smith@gsa.gov
- Financial POC: John Smith / john.smith.civ@mail.mil

Presented at the ICEAA 2023 Professional Development & Training Workshop - www.iceaaonline.com/sat2023

## **Block 14 - Full Line of accounting**



LINE	ACRN	SUPPLEMENTAL ACCOUNTING CLASSIFICATION	FUNDED AMOUNT
/DIST NUM			
0001/1		***097*2020*2020**0100*000**251*D*4GTN** 1234567 *012215*CIO*CIO-DOD CHIEF IN*CIO_CSI_CINT*20_0100D_0905388*251.10 Manageme***	\$1,200,000.00

#### • What is a Standard Line of Accounting (SLOA)

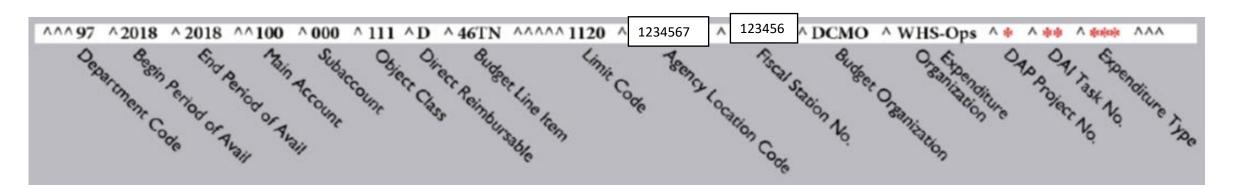
- SLOA follows the Standard Financial Information Structure (SFIS).
- SFIS is a comprehensive data structure that supports requirements for budgeting, financial accounting, cost/performance, and external reporting needs across the DoD enterprise
- As of October 1, 2022 all DOD Department wide Business System Financial Interoperability must have adopted SLOA.

# Presented at the ICEAA 2023 Professional Development & Training Workshop - www.iceaaonline.com/sat2023



#### SLOA can be broken down based on the following key:

<u>^^^097^2023^2024^^0400^000^^251^D^0604123D8Z^^^1100^12345678^012345^CDAO^CDAO – Chief</u>



- Budget Line Item can be useful to find additional funding docs
- Object Class can be used to help map costs against wbs
- Main Account also known as APPN
- Agency Location Code- can be used to find the cost center

## SLOA can be found on Contracts too!!



- When reviewing the contract language you will come across the funding or account data in a contract
  - Generally this would be found in "Section G Contract Administration Data"
    - "ACCOUNTING AND APPROPRIATION DATA"
  - This allows you to track who paid for what part of the CLIN, and with SUBCLIN funding this can be important

# **Financial Systems Connected**



- Many DOD Financial Systems have Data Sharing Agreements in place with external tools such as Advana
  - This allows cost estimators access to these systems to search for the data they need
    - Without
      - Requiring extensive User Training
      - Extensive single use Access Permissions for accounts

 <u>Advana" Defense Analytics Platform – Department of Defense - Defense Acquisition</u> <u>University (dau.edu)</u>

## References



- https://www.gsa.gov/cdnstatic/DD\_Form\_448\_Guide.pdf
- DAF PMRT Training. (2023, February 12). Retrieved from PMRT: https://pmrt.altess.army.mil/pmrt-training/
- Hairfield, R., & Pollard, D. (2017, March 17). ACQUISITION BUSINESS ROLLS OUT CCAR PROOF OF CONCEPT. Retrieved from U.S. ARMY PEO EIS: https://www.eis.army.mil/newsroom/news/networks/acquisition-business-rolls-out-ccar-proofconcept#:~:text=Recently%2C%20Defense%20Communications%20and%20Army%20Transmission%20Systems%20%28DCATS%29,program%20mana gement%20and%20reporting%20tool%20within%20P
- Harker, T. W. (2020, August 5). Business Systems Financial Interoperability and Standard Line of Accounting. Washington, DC.
- ICEAA. (n.d.). Cost Estimating Bode of Knowledge (CEBoK) version 1.2.
- Office of the Deputy Chief Financial Officer (ODCFO). (2023, February 12). Retrieved from Office of the Under Secretary of Defense (Comptroller)/ CFO: https://comptroller.defense.gov/odcfo/sfis.aspx
- Office of the Secretary of Defense. (2000, August 31). 253.208-1 DD Form 448, Military Interdepartmental Purchase Request. Retrieved from Defense Federal Acquisition Regulation Supplement (DFARS): https://www.acq.osd.mil/dpap/dars/dfars/html/r20060616/253208.htm
- Secretary of the Air Force Public Affairs. (2019, October 11). Chief Data Office announces capabilities for the VAULT Data Platform. Retrieved from Air Force: https://www.af.mil/News/Article-Display/Article/1987254/chief-data-office-announces-capabilities-for-the-vault-data-platform/
- U.S. General Services Administration. (2022, August 26). *G-Invoicing*. Retrieved from GSA->Buy Through US-> Shared Services: https://www.gsa.gov/buy-through-us/shared-

services/ginvoicing#:~:text=The%20adoption%20of%20government%20invoicing%2C%20otherwise%20known%20as,create%20orders%20track%20performance%20against%20orders%20transfer%20funds

- U.S. Government Accountability Office. (2021). U.S. Government Accountability Office Independent Auditor's Report 228. Washington: U.S. Government.
- United States Department of the Treasury. (2022, March 25). *Financial Report of the United States Government*. Retrieved from Bureau of the Fiscal Service: https://fiscal.treasury.gov/reports-statements/financial-report/current-report.html
- Washington Headquarters Services Financial Management Directorate. (2022, December 13). WHS Financial User Training. Washington, DC.

CHIEF DIGITAL AND AI OF PICE nted at the ICEAA 2023 Professional Development & Training Workshop - www.iceare Piper Piper Piper Secretary OF DEFENSE

