Bill of Material (BOM) Data Item Description (DID) Review
Summary of IPT Effort & Path Forward
BOM Objectives

**Problem Statement:**
Current FAR/DFARS Requirements provide very little format guidance for submitting cost and pricing data.

**Need Statement:**
The absence of DoD-wide policy requiring the collection of structured and consistent BOM data is severely limiting the DoD’s ability to make effective acquisition and cost estimating decisions.

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**Increase Effectiveness**
- Provide a holistic view of total program costs
- Facilitate telling the complete program “story”
- Create a standardized and repeatable process for submitting BOMs

**Ensure Completeness**
- Provide the missing link between supplier and prime contractor costs
- Provide more insight into FlexFile, Quantity and Technical data reports
- Receive crucial supplier information in addition to a complete list of parts, materials, quantities and unit price

**Improve Data Quality**
- Connect supplier, manufacturing and purchase agreement information with the Cost and Software Data Report (CSDR) Work Break Down structure
- Allow insight into pre-contract award process and provide annual BOM updates
- Integrate Cost and Contracting Communities

**Goal:** Structured BOM data stored in single repository available to defense cost, acquisition, contracting and logistics communities.
Gaps in Today’s Current CSDR Material Cost Data

Policy
› Absence of DoD-wide policy for collecting BoMs of robust, consistent content to support acquisition decision-making and life-cycle cost analysis

Product
› Lack of standardization in the BoM submissions
› Variations in part numbers, nomenclature, and serial numbers even for the same contractor, and sometimes within the same business segment
› Cost analysts have material cost data by WBS, but does not know the key cost drivers by WBS
› No data of commonality available to cost analysts; therefore, it is very difficult to normalize historical cost data and assumes all new or guess of commonality at prime mission level
› No data for minimum quantity buy requirement

Linkage to a Mil-Standard WBS
› Linkage to WBS is inconsistent or non-existent

Solutions to Gaps provided by a BOM Data Report

Policy
› Creation of a standardized reporting format (created by cross-organizational Integrated Product Team) and searchable database with capability to query parts across Services and/or part numbers

Product
› BOM data provided will integrate into FlexFile Material Costs line
› Supplier and supply tier information will be identified for all part numbers
› Collecting purchase data information such as: exchange rate, factor buy, basis of unit price, step pricing information

Linkage to a Mil-Standard WBS
› Breakout material cost and parts data by WBS
**BOM Use Cases**

**Cost Estimating**
- Improves Government’s negotiating position by creating symmetry in material data collection across DoD. Reduce information asymmetry to improve the Government’s negotiating position.
- Develop additive factor for scrap, spoilage, recognition of salvageable material etc.
- Allow the cost analyst to compare prices across platforms and suppliers
- Develops accurate and defendable escalation factors
- Understand the prime mission program complexity and scope from analogous program for data normalization and risk analysis
- Make vs Buy strategy used by prime contractor

**Should Cost Analysis**
- Quantity discount, multi-year procurement
- Cost data benchmarking across platforms

**Supply Chain Management**
- Highlights vendor chain- Tier 1, 2, and 3
- Better Evaluation of proposed material prices (Competing supplier quotes for same quantities, discounts, minimum buy, productivity factor, inventory etc.)

**Acquisition Strategy/Audit**
- Determine if proposed costs are consistent with established/disclosed practices
- Compare proposed quantity to supporting documents per CAs 401/402/FAR 31.202/31.203
- Commonality across platforms to estimate total quantity, learning curve and EOQ analysis.
- Understand effect of contracting strategies by contract type using BoM
- Detail material cost analysis as required by FAR 31-205-26
Data and Initial Findings

Six BOMs collected by DCMA HA for NCCA/Technomics (Pre-Option Year 1)
  › Aircraft (Excel)
    › P-8A Poseidon
    › KC 46
  › Missiles (Excel)
    › SM-2
    › Tomahawk
    › AIM-9
  › Unmanned Aircraft (PDF)
    › Triton
The number of data fields range from 98 (Tomahawk) to 31 (AIM-9)
No uniformity on fields across programs and contractors

Aviation CIPT Contractor Responses

<table>
<thead>
<tr>
<th>Questions</th>
<th>Supplier A</th>
<th>Supplier B</th>
<th>Supplier C</th>
<th>Supplier D</th>
<th>Supplier E</th>
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</thead>
<tbody>
<tr>
<td>Level of BOM Shared with Govt./Is this the same BOM for DCAA Audits</td>
<td>No, not same shared with DCAA</td>
<td>Yes</td>
<td>Yes, CBOM shared with DCAA</td>
<td>Yes, CBOM shared with DCAA</td>
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<tr>
<td>Is a BOM mapped to WBS with parent child relationship?</td>
<td>No but can supply if requested</td>
<td>Yes</td>
<td>Yes, mapped if requested in RFP</td>
<td>Yes</td>
<td>Yes, depending on site/program</td>
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<tr>
<td>Is BOM output of your MRP system?</td>
<td>Fully integrated BOM and MRP system (SAP) and BOM is input to MRP system not output</td>
<td>BOM is output of the ERP system and loaded into Material Planning System/ utilizes SAP system</td>
<td>Yes, maintain Material Management and Accounting System for planning, controlling and acquisition</td>
<td>Yes/ scheduled requirements, BOM, Part/Material Master Data and inventory feed MRP</td>
<td>Yes, CBOM is best of what is known at time for estimating</td>
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<tr>
<td>Parts commonality across platforms</td>
<td>Yes, across platforms</td>
<td>Yes</td>
<td>Some hardware and material components</td>
<td>Yes, common parts across many platforms</td>
<td>Yes</td>
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<tr>
<td>How is BOM used across competency skills (cost estimating, product engineering, O&amp;S, etc.)</td>
<td>• Engineering – Design &amp; SE • Configuration of end item • Manufacturing • Supply Chain • O&amp;S managed through EBOM • Cost Estimating</td>
<td>• Engineering – Manufacturing • Supply chain • Sustainment • Contracting • Cost Estimating</td>
<td>• Engineering –SE Manufacturing • Supply chain • Sustainment • Contracting • Cost Estimating</td>
<td>• Engineering • Manufacturing • Supply chain • Sustainment • Contracting • Proposal</td>
<td>• Systems Engineering-PBOM/CBOM • Cost Estimating-creators of PBOM/ CBOM • Manufacturing • Supply chain</td>
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<tr>
<td>Make vs Buy decision tracked in BOM</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes/ kept in current SAP</td>
<td>Yes/ tracked in BOM</td>
<td>Yes/ tracked in BOM</td>
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Why a BOM Data Report?

› Supplier costs have grown as % of contract effort since original CCDR report formats were developed; often exceeding 60%

› Data Samples from contractors show a lot of detail on prime contractor costs, limited detail on suppliers

Current CSDR allows calculating cost improvement/Learning curve at WBS level.

› The BoM data report will provide an opportunity to drill cost down further to improve transparency.

› Several organizations have tried to standardize a BOM submission; however none have created a report that reaches across competencies (including the Material Data Report created by NAVAIR).

› There is no material report or BOM DID today that integrates the requirements reported into a relational tables, analytical tools or common database for access across DoD.

Consolidated and standardized BOM data will provide better risk bounds with knowing parent child information, commonality and key cost drivers. Risk analysis is more robust in overall cost estimate.
Bill of Material Development Process

EBOM
- Engineering Bill of Material
- Assembly detail
- Design parts
- Common/Panstock
- Not coded for procurement type (Make, buy, IWT)
- Part number & specs

MBOM
- Manufacturing Bill of Material
- Supplier part numbers
- Make buy
- Unit of measure
- Quantity

IBOM
- Indentured Part List Bill of Material
- Assembly full build ups
- Parent/child relationships

PBOM
- Price Bill of Material
- Contains all cost and pricing detail
- Supplier quotes
- Historical data
- Escalation/Quantity adjust/Other factors

CBOM
- Consolidated Bill of Material
- Contains all cost and pricing data captured in PBOM but is consolidated
- Supplier quotes
- Historical data
- Escalation/quantity adjust/other factors
- Usually version submitted to DCAA
The BoM IPT is made up of leaders across the Services, Acquisition and Contracting communities in order to make sure a wide range of commodity groups are represented.
The rest of Option Year 1 will focus on soliciting government feedback on the current draft DID and draft Data Model.

After solidifying a draft DID, the focus will shift to introducing Industry to the requirements and information needed to fill out the BOM.

Option Year 2 will focus on piloting with Industry and iterating with both Government and Industry to produce a final DID and data model for initial ingestion into CADE.

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<th>Option Year 1 Work Plan</th>
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<tr>
<td><strong>Actions</strong></td>
<td><strong>Responsibility</strong></td>
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<tr>
<td>Complete review and adjudication of comments</td>
<td>Praful Patel Jenighi Powell</td>
</tr>
<tr>
<td>Technical Review Follow-Up with CADE Development Team</td>
<td>Praful Patel Jenighi Powell John McGahan</td>
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<tr>
<td>IPT Meeting to discuss: (1) Comments/Adjudications (2) Review Draft DID structure and Initial Data Modeling</td>
<td>IPT Team</td>
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<tr>
<td>Make changes/Update DID based on IPT review</td>
<td>Praful Patel Jenighi Powell</td>
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<tr>
<td>Send for review/comment to IPT Team</td>
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<tr>
<td>Review/adjudicate comments</td>
<td>Praful Patel Jenighi Powell</td>
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<tr>
<td>Brief Cost Community Leadership (Senior Steering Group)</td>
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**Data Group A**

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<tr>
<th>Contract Metadata</th>
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<tr>
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<tr>
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<td>Prime Mission Product Series</td>
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<td>Fiscal Year/Multi-Year</td>
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**Data Group B**

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<tr>
<th>Manufacturing Part Nomenclature</th>
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<tr>
<td>WBS Code/Level/Name</td>
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<td>Base Contract Year</td>
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<td>End-Order Code</td>
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**Data Group B (Continued)**

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**Data Group C**

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<th>Supply Base Nomenclature</th>
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<tr>
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<td>Supplier Name</td>
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**Data Group D**

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<td>Minimum Quantity Buy</td>
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<td>Quantity Required per Unit</td>
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<td>Spare Quantity</td>
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<tr>
<td>Additional Quantities</td>
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<td>Utilizing Quantity</td>
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<tr>
<td>PMP Quantity</td>
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<td>Unit Price</td>
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**Data Group E**

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<th>Purchase Price List Data</th>
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Areas of Evolution

Consolidated Bill of Material for initial report

Bill of Material with actual cost preferred for final submission

Requirements removed or Combined since March 2017

- Work Unit Code
- Part Category
- Source of Supply/Govt. Supply
- Small Business
- Publicly Held Company
- Purchasing Strategy
- Total Cost
- Escalation (Y/N)
- Purchase Order Information
- Annual Productivity
- Federal Supply Classification Code
- 1921-1 Description
- SM&R Code
- Alternative Supplier POC
- Anticipated Future Need
- Special Charges
- More Detailed Material Information
- How many on one instance of Variants
- Evolution Part Numbers
Bill of Material DID Schedule

**Requirements Definition**
- Identify Key Stakeholders
  - Dec 1 – 25 Apr
- Understand FAR/DFARS requirements for BoM
  - Dec 1 – Dec 30
- Develop Use Cases for BoM
  - Jan 25 – Feb 25
- Identify gaps in material cost reporting
  - Jan 25 – Feb 25
- Dec 2 – May 31, 2017
- Generate BoM Requirements to standardize across services
  - Dec 2 – May 31, 2017
- Collect sample BoMs for different commodities
  - Feb 25 – Jun 30
- Collaborate and Collect key supplier data
  - Feb 25 – Jun 30

**Draft DID**
- Draft BoM within sub-groups
  - 14 – 31 Jul
- Collect sample BoMs for different commodities
  - Jun 31

**BOM DID Technical Review**
- Present to Cost Community at Dec. SSG
  - Dec 18 – Jan 5

**Ground Vehicle CIPT**
- BoM Briefing and Q&A at (1-1 session)
  - Ground Vehicle CIPT

**Aviation CIPT**
- BoM Briefing and Q&A at (1-1 session)
  - Aviation CIPT

**Initial Technical Review Mtg of BOM Requirements**
- Initial Technical Review Mtg of BoM Requirements
  - Sep 13 – Oct 18

**Draft 1 IPT Comment & Adjudication**
- Draft 1 IPT Comment & Adjudication
  - Oct 18 – Nov 10

**Draft 2 IPT Comment & Adjudication**
- Draft 2 IPT Comment & Adjudication
  - Nov 18 – Dec 10

**Draft 3 IPT Comment & Adjudication**
- Draft 3 IPT Comment & Adjudication
  - Dec 18 – Jan 5

**Data Model Draft 1**
- Data Model Draft 1
  - Draft 4 IPT Comment & Adjudication
  - Jan 18 – Feb 5

**Pilot Kick-Off Focus Group**
- Pilot Kick-Off Focus Group
  - March 2018

**June 13 BOM IPT Meeting**
- June 13 BOM IPT Meeting
  - June 13 BOM IPT Meeting

**Sept 13 BOM IPT Meeting**
- Sept 13 BOM IPT Meeting
  - September 2016

**Oct 18 – Nov 10**
- Oct 18 – Nov 10

**Training/ Roll-Out**
- Training/ Roll-Out

**2016-2017**
- December

**2017**
- January

**2018**
- February

**CRAWL**

**WALK**
BOM DID Review
Bill of Material DID Schedule – Option Year 2

Solicit volunteer pilot program
December-February

Pilot Implementation Phase

- Pilot Phase 1
  - Industry Comment & Adjudication
  - BOM IPT Meeting
  - Industry Review
- Pilot Review/Update DID & Comment Adjudication

Formal Coordination & Roll-Out

- Pilot Phase 2
  - Industry Comment & Adjudication
  - BOM IPT Meeting
  - Industry Review
- Pilot Review/Update DID & Comment Adjudication

- BoM DID Data Modeling – IT Development
- Formal Coordination
- Training/Roll-Out

February 2018 | March | April | May | June | July | August | September | October | November | December | January | February 2019

WALK

RUN
BOM Initial Data Modeling
(technical Team Perspective)
Initial Technical Team Perspective On BOM

• Assessment from draft BOM DID review and subsequent technical/data definition discussions
  • Used with and without CSDRs plan
  • Different data scope based on type/timing of BOM development
  • Intended to improve traceability/understanding of material costs on 1921-1
  • Implied tie-in to FlexFile
  • Intended to understand supply change across industry (comparability across contractors)
  • Automated data ingestion vs. a stand-alone data artifact
  • Significantly more “implied structure” from BOM data definitions.
The foundation is a resource associating dollars or hours with a charge number in the accounting system at a point in time.

Contracting process tie-in
- Contract Line Item Number (CLIN)
- Forward Pricing Rate (FPR) Categories
- Reporting Month

FlexFile requires
- CSDR Plan WBS Reporting
- Recurring or Non-Recurring (may be mapped from FPR Rate Cats)

Technical/Programmatic linkage
- End Item / Lot Quantity by WBS
- Unit or Sublot

* As Required by the CSDR Plan and only for touch labor
Within the CSDR Business Process
› Intended to provide context and insight into material costs drivers
› Ideally provides lower level detail to aggregated material costs as reported within FlexFile or legacy CCDR reporting

Outside the CSDR Process
› DID is designed for use without a CSDR Plan
Initial BOM Data Model Summary

BOM Major Data Blocks

**Contract Tie-in / Structure**
- WBS
- Order/Lot
- End Item
- CLIN

From Plan or FlexFile

**Part/Assembly Quantity Data**

**Higher Level Assemblies**

**Report Metadata**

**Parts Data**

**Suppliers**

**Supplier Contract Agreements**

**Purchase Data**

Used in conjunction with CCDRs, need tie-in to CSDR/FlexFile Plan
- Map to plan WBS
- CLIN, Order/Lot, and End Items
- Relationship to 1921-Q (TBD)

Used outside CSDR process, most Plan links are optional

Some data blocks may be optional as a function of type of BOM
- Minimum requirement is metadata and parts
- Part quantity mapping to HLA and WBS highly desirable
- Supplier data may not be available in some applications
## Data Model 30,000ft View

### Report Metadata

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>Security Classification</td>
<td>UNCLASSIFIED</td>
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<tr>
<td>Proprietary Statement</td>
<td>Demo Corporation Proprietary Data</td>
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<tr>
<td>Program Name</td>
<td>DF-ST Demonstration Space System (COSS)</td>
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<td>Phase or Milestone ID</td>
<td>D</td>
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<tr>
<td>Prime Mission Product</td>
<td>Demo</td>
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<tr>
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<td>Demo Corporation</td>
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### Part Data

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<th>NBN</th>
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<th>Revision Level</th>
<th>Unit Of Measure</th>
<th>NACCS Code</th>
<th>Material Type</th>
<th>Data Rights Code</th>
<th>Part Ident Num</th>
<th>Make Or Buy</th>
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### Higher Level Assemblies

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#### Supplier Data
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#### Supplier Contract Agreements
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#### Supplier Purchase Data
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<th>Unit Price</th>
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<th>Remark</th>
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#### Part Assignment Qty Data
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<th>EndItemID</th>
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<th>CLNID</th>
<th>PartQTYPerItem</th>
<th>CMP End Assembly Pegging</th>
<th>Assigned Price</th>
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#### HLA Assignment QTY Data
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<th>OrderLotID</th>
<th>CLNID</th>
<th>PartQTYPerItem</th>
<th>CMP End Assembly Pegging</th>
<th>Assigned Price</th>
</tr>
</thead>
</table>
Final Thoughts

• A work in progress
  • Avoid “over-engineering” requirement
  • Avoid “throwing in the kitchen sink”; right size the data request
  • Ensure we understand the domain experts (working group) data need
  • Prepare an initial draft File Format Specification

• Need to define the expected CAPE/CSDR business process
  • How is the requirement places on contract to align with a CSDR; is it added to the submission event table of a CSDR plan?
  • What is optional (as a function of the time/timing of the requirement)
  • What constraints (or lack of constraints) on mapping to the CSDR plan WBS?
  • What are the traceability constraints to a CCDR or FlexFile?
  • Is this expected to be a “human-in-the-loop” administrative action and to what extent; who owns the activity (CAPE, cost centers, etc)

• Is this a financial, programmatic, or technical data requirement?

Industry Engagement: Pilot By Commodity, ACAT, Phase....
Comments & Adjudicated Responses
Substantive Comments for Review

General Questions/Concerns Applicable to Entire DID

› Term "Contractor" or "Prime Contractor" is used frequently where instruction should be applicable to Government performing organization as well.
› How will this DID integrate with other CSDR related DIDs?
› Examples should move to Implementation Guidance
› Clean up administrative comments
› Need to clarify definitions in relation to what information we want to receive
Data Modeling: What? Why?

• Typically the term is used in the context of database definition and structuring
  • Collection of database tables to contain anticipated data with defined data fields, types, etc.
  • Data field relationships that define the hard and soft rules that govern the creation and management of data records within the tables

• CADE requirements/tech team use as a communication device to describe in “human” terms our understand of the data definitions, relationships, and requirements
  • Initially represented as a collection of “normalized” data tables (Excel)
  • Preliminary definitions of data table and field relationships, key fields, etc.
  • Initially intended to give a visual representation of our (developer) understanding of the data requirements
  • Typically leads to revisions to the associated DID and the development of data exchange standards (XML, JSON, flat file)
BOM Pilot Phase Objectives

**Understand**
- How contractors develop BOMs, with attention to:
  - Contractor source data systems
  - Existing data fields
  - Barriers to establishing a common taxonomy

**Educate**
- Government use cases for cost data
- How BOM data can fit into CSDR reporting process
- Identify any additional data fields needed

**Socialize and Obtain Buy-In**
- Assess industry impact
- Socialize and iterate Draft DIDs among defense cost, acquisition, contracting and logistics communities
- Obtain approval from stakeholders
- Provide summary and lessons learned from pilots

**Crawl Phase**
- Requirements gathering
- Iterate within IPT team to develop drafts of DID
- Initial technical Review and first draft of data model
- Early pilots to explore contractor ability to provide ideal requirements by commodity

**Walk Phase**
- Finalize DID for formal DSP approval
- Implementation pilots aimed at contractor ability to fill out initial data model

**Run Phase**
- Collect lessons learned from all pilots and update DID accordingly
- Focus on analytic tools and ingestion capabilities for BOM data

---

**BOM Evolution**
- **Legacy** 1960 - 2017
- **Crawl** March - May 2018
- **Walk** Round 3 Oct 2018
- **Run** 2019
- **Future** 2019+
### Cape Cost, Software, and Technical Data Item Descriptions

#### Bill of Material Overview

**CAPE Cost, Software, and Technical Data Item Descriptions**

**Software Data**
- Dev, Main, ERP
- MGMT-82035A

**Technical Data**
- MGMT-82165

**Maintenance & Repair Parts**
- MGMT-82163

**Contractor Business Data**
- 1921-3

**Contractor Material DID**
- 1921-8

---

### FlexFile & Quantity

**FlexFile**
- FNCL-82162 & MGMT-82164

- Unallocated Actual Costs & Hours
- WBS, Control Account, Work Package Data by Month
- Recurring vs. Nonrecurring CLIN & Unit/Lot/Variant Functional Rate (Govt & Internal)
- Allocation Methodology
- EACs by WBS
- WBS Dictionary, CTR
- Internal Dictionary, Remarks by WBS

**FNCL-82162**
- To Date & At Completion Units in Process
- Variant/Lot/Block Concurrent Units
- GFE Units

---

### Software Data

- Dev, Main, ERP
- MGMT-82035A

- Software Release Name
- Start and End Date
- Requirements Count Definitions
- Hours per Staff Month
- Software Process Development Activities
- System Description
- Code Counter Version
- CSCI Name

- Outsourced Development Functional Description
- State of Development Development Process
- Product Size Reporting
- SLOC-Based Software Size Number of Defects

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### Technical Data

- MGMT-82165

- Technical Parameter Name
- WBS Mapping ID
- Item Type
- Group Key
- Value
- Unit of Measure
- Unit of Measure Qualifier
- Estimate/Actual
- Model/Variant
- Remarks

- Maintenance Event
- End Item Number
- Model/Variant
- Non-Mission Capable
- Failure Code & Description
- Start/Completion Date
- Organization/Location
- Maintenance Type
- Man Hours & Material Cost

- Repair Part Name
- Quantity
- Part Number/LRU
- Unit Price

### Business Data

- Business Unit
- Program/Contract #
- Buyer
- Direct & Indirect
- Cost/Hours/Manpower
- Total G&A Cost
- Direct/Indirect Cost Rate
- G&A Rate
- % of Full Prod Capacity
- # of Shifts
- Direct Labor Rates
- Total Revenue

### Material DID

- WBS/Parent-Child Relationship
- Part Number & Description
- Next Higher Assembly
- Quantity per Unit
- Make or Buy
- Material Type
- Supplier Information

---

20
INTRODUCTION: The Consolidated Bill of Material (CBOM) Report is a listing of parts and required quantities and price for all electronic, electrical, mechanical and materials used to manufacture or produce a prime mission product and/or sub system assembly supplied as an end item to prime contractor. The CBOM Report will be reported in a relational database that will be used by all DOD activities, Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) for procurement analysis. This report provides a listing of parts and required quantities to fabricate/manufacturer a system or sub system assembly and identify service parts for sustainability.

Substantive Comments for Review

“It seems that this report should only be asked for on certain key/major programs and only collected once near the beginning (after CDR?) and a final one at the end of a contract.” Bruce Thompson, SMC

Proposed new language to broaden use of DID: The Consolidated Bill of Material (CBOM) Report is a listing of parts, required quantities and prices for all materials used to satisfy the requirements of the contract to include materials purchased by the reporting entity and subcontractors to manufacture or produce a prime mission product and/or sub system assembly. Mary Anne Scully, Air Force

Agree. Will rework language in Introduction to highlight multiple uses for DID
Substantive Comments for Review

Reporting Frequency — Answers to these questions will move to Implementation Guide

› Are we requiring a submission at Contract Award?
› Should we require a submission at Contract Completion?
› Should we include any requirement specifying frequency of reports and allow this to be established by CWIPT or during planning process?
› Why are we requiring a pre-award submission? How do we enforce and seems to be a lot of opportunity for disconnects as we have limited or no insight into the negotiation process. Not sure what that pre-award info would be used for?
› Specify frequency requirements, such as Award + 30 days
› Should we clarify whether initial CBOM is required for both sole source and competitive contracts?
› Should we remove any references to proposal or RFP in the DID? Agree
  › At proposal time, there is no contract (necessarily) in force that could reference this DID in CDRL or other SOW language. DIDs are for requirements to Contractors under contract. You can ask for a BOM report to be delivered once a winner has been chosen, but not prior to contract award. – Bruce Thompson, Air Force
› Given requirement for information like GFE and Data Rights, DID reporting should also be in accordance with contract (or comparable Govt agreement). – Mary Anne Scully
  › Won’t be applicable to Government entities. RDT will spell out GFE components.
CRM & Data Group Review – Data Group A- Contract Metadata

Data Group A- Contract Metadata 15
Approved Plan Number .................. 5
CLIN ...................................... 3
Prime Mission Product .................. 1
Solicitation Number ..................... 1
Reporting Org Type ..................... 1
Fiscal Year/Multi Year ................... 1
All .................................................. 3

Classification
Substantive .................................. 10
Administrative .............................. 5

Substantive Comments for Review

Contract Metadata
› Consider making examples less generic where we know variation is important? Detailed examples will move to implementation guide.

› What value does CLIN Number provide? Ex. Aircraft everything will be mapped to CLIN 0001 - Don Allen, NAVAIR
   › Addresses Army and Marine Corp who utilize the CLIN structure so this will help them. In a lot of instances CLINs are treated like a separate contract. If we’re tying the BOM to CSDRs some of the time, it’ll be optional in some instances

› Some of our weapons systems are configurable and are composed of multiple modular units. I would imagine for a weapons system like this, each modular unit would have its own BOM. But also, each modular unit may be used in several different configurations; and each configuration may have a different number of a particular modular unit. – Melody Liao, DASA-CE
   › Database structure will identify how the parts are sorted. Making some parts common, some are unique. Allow for end item breakout and associate where it goes (i.e., common or unique).
   › Should be able to see how list of parts/materials and it’ll be distributed based on consumption and identify where it goes (end item, order/lot etc.). Formats and implementation guide will discuss how this accomplished.
### Substantive Comments for Review

#### Manufacturing Part Nomenclature

- Change title of Base Contract Year to “Fiscal Year of Purchase” – Scott Adamson
  - The database structure will capture the intent. We are more concerned with the inflation indices
- Do we want both Part Description and Part Number Nomenclature? Rejected comment, we need both.
- Do we want NIIN, NSN, PIN and when do you provide one or all?
  - This information provides a unique part identification number. 5000.2 has an engineering description so we want that information tied to the part number associated with it.
- NHA data field only requests for Name of Next Higher Assembly. Do we want to capture Part Number Instead? Clarify requirement to make sure part number is captured. Suzanne will review to ensure language is robust so we understand relationship between parent/child relationship.
- Will there be parts that belong to NHA and not in WBS? There could be- data model will account for this
- What is the Value of having NHA? This will give insight into the gaps in the WBS. Better for cross commodity comparison. Database structure will address this.
- Can we clarify the Part Description requirement? Agree. Will clarify
- Is the Unit of Measure per WBS element? Unit of measure by Part Number
### Substantive Comments for Review

#### Manufacturing Part Nomenclature

- **Change title of Base Contract Year to “Fiscal Year of Purchase”** – Scott Adamson
  - No. data model will allow for dates of purchases to be entered. Will clarify language.

- **Is GFE/CFE requirement supposed to be entered if something is GFE/CFE and a NAICS Code doesn’t apply?**
  - We want to know where it’s coming from. This information is available, the cost would just be zero. GFE will be its own category. Page 7 of the DID, Renumber 18, it looks like it’s imbedded under another category but should be its own
Substantive Comments for Review

Supply Base Nomenclature

› Supplier Part Number- since this entire DID is applicable to prime contractors and direct reporting subs why wouldn’t the requirements identified in Data Group B items 5 (contractor part #) and 7 (OEM part number) apply to direct reporting subs. This item seems redundant. – Scott Adamson

› We have to track contractor part # and OEM part # in their database anyways. Would like to get to a point where traceability exist between BOMs. In instances where sub and prime have different part numbers so need traceability to lowest level part. If you’re dual sourcing parts from different places we want to make sure we know what the part is. Likely that these all have the same number but there are instances where they will not track

› What should contractor enter if Type of Contract is not known (during Proposal Phase)? Address in implementation guide

› What are we asking to be entered for Multi-Year/Long-Term Contract? Will be covered in file specification. Enter Dates.

› Should we make Supplier Tier optional? (Space products will be N/A for this field)

› Reject will discuss. Supplier tier will be optional if it doesn’t apply. This will be part of the implementation guide; In DID it states to put N/A. Maybe include this in the table so it’s clear.

› Single Source and Procurement Lead Time may not be tracked by industry in a database and require manual entry. Should these fields be optional? Reject it’s in IMS

› Is Type of Contract to be entered by Subs and Reporting Contractors? Yes
Substantive Comments for Review

Supply Base Nomenclature

› Type of Contract - Make clear this is not required for Raw material and purchased parts from standard Purchas orders of stock items. – Bruce Thompson, SMC
  › Raw material should still have a contract type – cost type contract. Will need to discuss how to handle custom parts in implementation guide.

› Does this report replace or supplement the Resource Distribution Table? Is it stand-alone for certain types of “parts” (i.e. contracts)? – Bruce Thompson, SMC
  › No it doesn’t. Not applicable to this DID
### Data Group D- Quantity Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>Minimum Quantity Buy</td>
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<tr>
<td>Quantity Required Per Unit</td>
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<tr>
<td>Spare Quantity</td>
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<tr>
<td>Additional Quantities</td>
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<tr>
<td>Unitizing Quantity</td>
<td>1</td>
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<tr>
<td>PMP Quantity</td>
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<tr>
<td>Non-Recurring Costs in Unit Price.</td>
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<tr>
<td>Unit Price</td>
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### Classification

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<tr>
<td>Administrative</td>
<td>2</td>
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</tbody>
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### Substantive Comments for Review

**Quantity Data**

- **How should we define the quantity data we are looking for?**
  - change definition on page 1 to "documents quantities associated with the parts included in the CBOM" – Scott Adamson, AFCAA. *Agree. Will clarify language*

- Definition first sentence indicates Add'l Qty is something that "supports the program". I'm not sure FMS qty "support the program". I think FMS should be associated with the unitizing qty (item D.1.5). FMS bought concurrently with US impacts the overall qty of the part purchased but FMS qty doesn't really "support the program". – Scott Adamson, AFCAA
  - Keeping additional quantity as is, with the exception of breaking out the scrap/rework.

- **Should there be a remarks field for unitizing quantity?**
  - Unitizing quantity (pg 12 of the DID) definition is sufficient. Will need to be discussed in the database structure

- **Should Non-Recurring Costs in Unit Price and Unit Price both be included in Data Group E?** DID will be restructured to fit data model.
**Substantive Comments for Review**

**Quantity Data**

› The title of the paragraph is unit price, however the description of the data required and the remainder of the DID imply that "Unit Cost" is more applicable, as the term price implies that all burdens are included -- however the burdens are separately identified in paragraph 8 of section E.

Data Group E - Purchase Data - Chris Downing, Air Force  
We're looking at cost. For subcontractor you'll get the price.

› Should there be a minimum dollar requirement for each part?  
**No limit or dollar minimum**

› How do we handle consumed or broken units?

  › Add scrap/rework quantity into the DID, we only have spare, additional (FMS sales etc.) as a catch all but we should have scrap quantity spelled out separately. Spares may be a separate CLIN so how do we account for that. John to make sure he captures part losses and structure for spares, additional parts per losses. And DID needs to take care of loss factor problem
### Substantive Comments for Review

#### Quantity Data

- This paragraph assumes that the reporting contractor has specific insight into the non-recurring costs of their suppliers. If they do, then they should be able to provide the required data. If not, we should give them an expected response too. For me, this paragraph is confusing because it first refers to unit price and later refers to unit cost. The reporting contractor's unit price includes their costs (handling) and profit on top of their supplier's unit price. This comment, with regards to price vs cost, applies to the next paragraph as well. - Kelly, USMC
- We will clarify price vs. cost to address this.
- Does Additional quantities include spares, items supporting trainers, etc.? If so, should we clarify requirement?
  - In the –Q the quantity stream is broken out by model so it has structure baked in for trainers. Parts are consumed and assigned for trainer vs. full up version. Trainer units will be captured the same as spare parts.

---

**Data Group D- Quantity Data**

- **Minimum Quantity Buy**
  - 1
- **Quantity Required Per Unit**
  - 2
- **Spare Quantity**
  - 2
- **Additional Quantities**
  - 3
- **Unitizing Quantity**
  - 1
- **PMP Quantity**
  - 1
- **Non-Recurring Costs in Unit Price**
  - 3
- **Unit Price**
  - 1
- **General**
  - 4

**Classification**

- **Substantive**
  - 16
- **Administrative**
  - 2
Substantive Comments for Review

Purchase Price List Data

› Make or Buy: If the contractor is making an item in house he likely purchased some raw material to then fabricate into a part. The raw material I would assume will show up in the CBOM as such. The hours to fab the part will show up in the flex file. What unit price is expected to be included in the CBOM for make parts? Are we asking the contractor to estimate the cost of the fabricated part and if so are we double counting the labor effort if they are also reporting that in the flex file? – Scott Adamson

› Which category would Negotiated Price fit into?

› Is there a need for Step Pricing? The qty and unit prices reported over time should provide insight into changes in price with qty. This creates a manual entry into a Remarks field. – Scott Adamson

› How should Warranty only be reported? As text in its own remarks section or report remarks section?

› Does Make or Buy refer to Prime Contractor, Sub Contractor or both?
# Substantive Comments for Review

## Purchase Price List Data

- **Basis of Unit Price:** As stated in a previous comment, I am concerned that the numerous choices we are giving the reporting contractor for this data element gives the contractor the opportunity to not give us actual costs. I understand that during initial reports, actual costs may need to be estimated so it is important for us to know the basis for those estimates; however, it may need to be stated that actual costs need to be reported when available. -Kelly, USMC

- **What data do we want to collect for the Burden Code requirement?**
  - The word Burden code implies there is a standard code list across contractors. Do we want just a description or the actual rates/factors applied to the material cost. Don Allen, NAVAIR

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### Data Group E- Purchase Price List Data

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<tr>
<td>Basis of Unit Price</td>
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<tr>
<td>Step Pricing</td>
<td>4</td>
</tr>
<tr>
<td>CMP End Assembly Pegging</td>
<td>2</td>
</tr>
<tr>
<td>Burden Code</td>
<td>1</td>
</tr>
<tr>
<td>Warranty</td>
<td>1</td>
</tr>
<tr>
<td>General</td>
<td>2</td>
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</table>

### Classification

<table>
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<th>Classification</th>
<th>Count</th>
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<tbody>
<tr>
<td>Substantive</td>
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<tr>
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<td>3</td>
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