



JCTMI



U.S. ARMY



JOINT CLOTHING & TEXTILE MODERNIZATION INITIATIVE (JCTMI)

Lucinda (Cindy) Stocks
Systems Acquisition Manager, PdM SCIE
lucinda.m.stocks.civ@army.mil

Every Ounce Matters,
Every Bullet Counts

16 November 2023

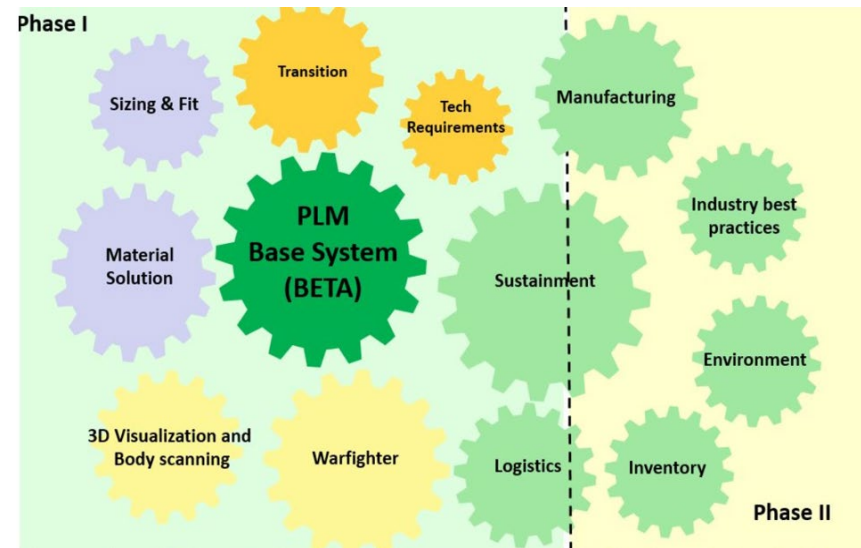


JCTMI Overview

Purpose: Comprehensive path forward with pooled resources and integrated efforts across the Services to manage and capitalize on technological advancements (i.e., digital repository, body scanning) that impact the C&T acquisition lifecycle.

Objectives:

- Digital transformation and decision support capability
- Cross service coordination and commonality
- Improved internal operations
- Increased operational readiness (agile acquisition)
- Improved supply chain communication (availability, quality, response)
- Reduced logistical burden (inventory utilization / better fit)



Ensuring warfighters receive the right uniform, with the right fit, at the right time, to ensure mission success.

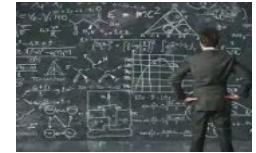


Transition to Digital Engineering (PLM)

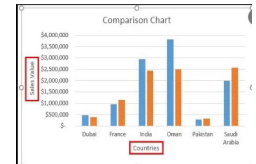
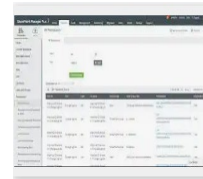
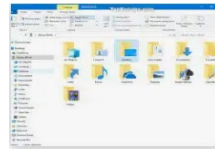
Evolution for DoD Clothing and Textiles

Current DoD

Manual



Electronic



Information

Specifications

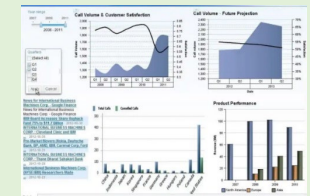
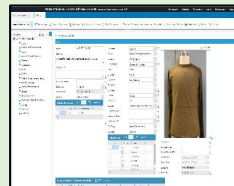
Repositories

Search

Analytics

Future DoD

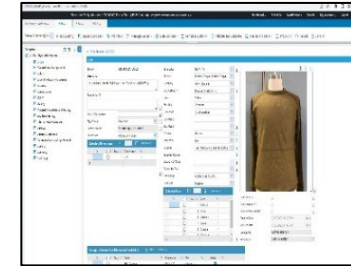
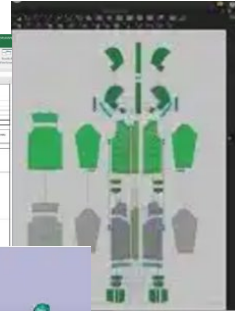
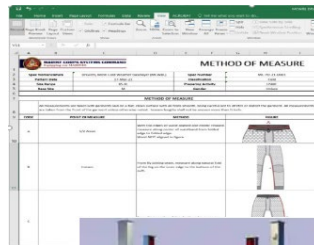
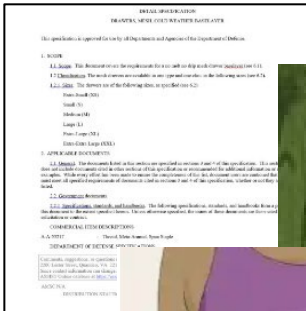
Digital





How Do We Get There?

Digital Transformation



Current

- Singular modular platform
- Integrated digital tools
- Decision support
- Real time analytics
- Search / Cross referencing capability

Interim

- Policy alignment
- Cross service and cross functional communication
- Process commonality across services

Future



JCTMI Integrated Product Teams (IPTs)

Digital Platform and Implementation IPT

- Digital transformation
- Centralized data sharing, decision support & analytics
- Cross service coordination

Body Scanning IPT

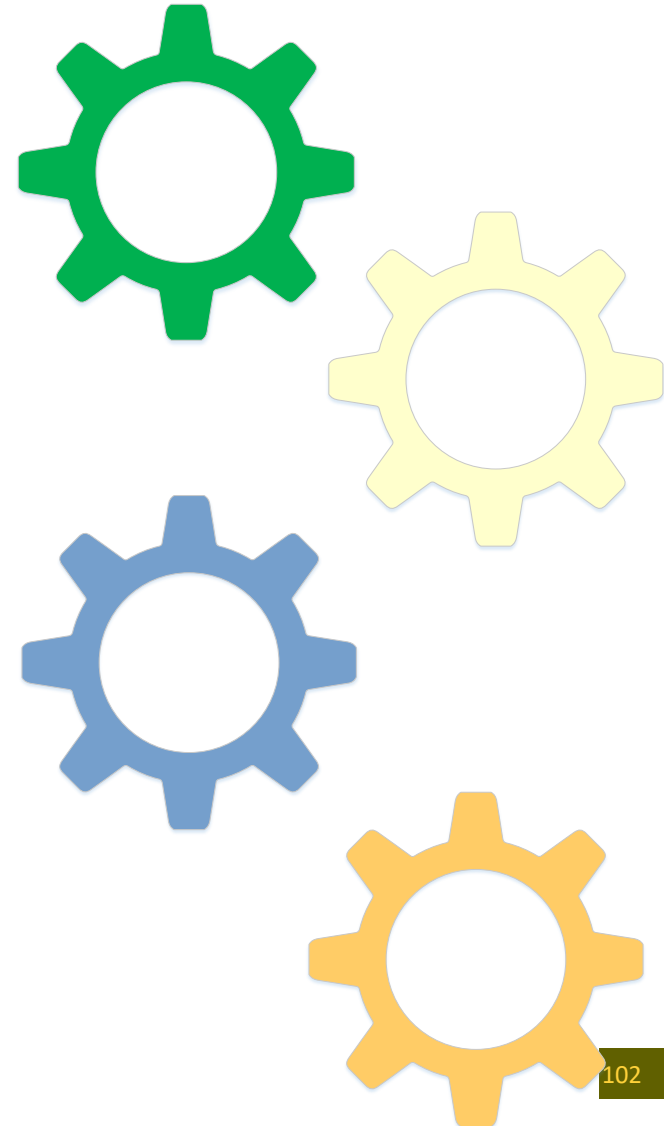
- Body scanning (portable, affordable, available)
- 3D Visualization
- Warfighter population composition and size prediction

Joint Sizing & Fit IPT

- Size reconciliation and improved fit (Block patterns)
- Garment simulation and virtual prototyping
- Improved tariff prediction

Transition and Configuration IPT

- Streamlined for modern manufacturing
- Capitalization of industrial best practices
- Tech pack utilization





JCTMI Points of Contact

Implementation IPT (Army Lead*)

- POC: Emily Madden:
emily.a.madden2.civ@army.mil
- Lucinda Stocks:
lucinda.m.stocks.civ@army.mil

Joint Sizing & Fit IPT (Navy/ Coast Guard Lead)

- POC: Dr. Brianna Plummer:
Brianna.l.plummer2.civ@us.navy.mil;
- Kim Olen:
kim.m.olen@uscg.mil

**Working groups led by Army, Air Force & Navy*

Body Scanning IPT (Updating in progress*)

- POC: Emily Madden:
emily.a.madden2.civ@army.mil
- Lucinda Stocks:
lucinda.m.stocks.civ@army.mil

Transition and Configuration IPT (Army Lead)

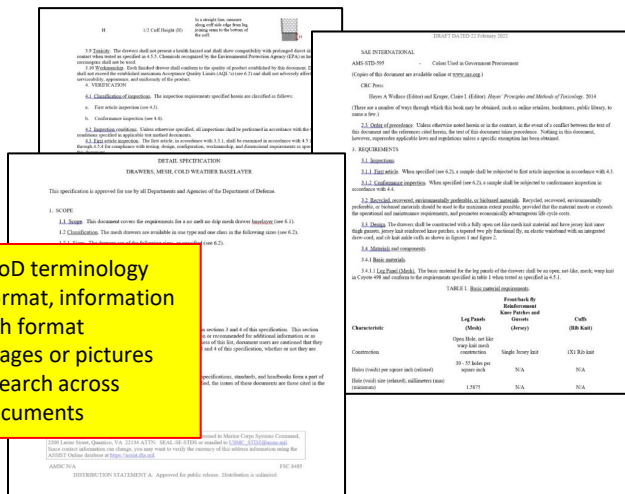
- POC: Bonnie J. Slocum-Dunford:
bonnie.j.slocum-dunford.civ@army.mil



Transition to Product Data (Implementation IPT)

Current

Specification (Word Document)

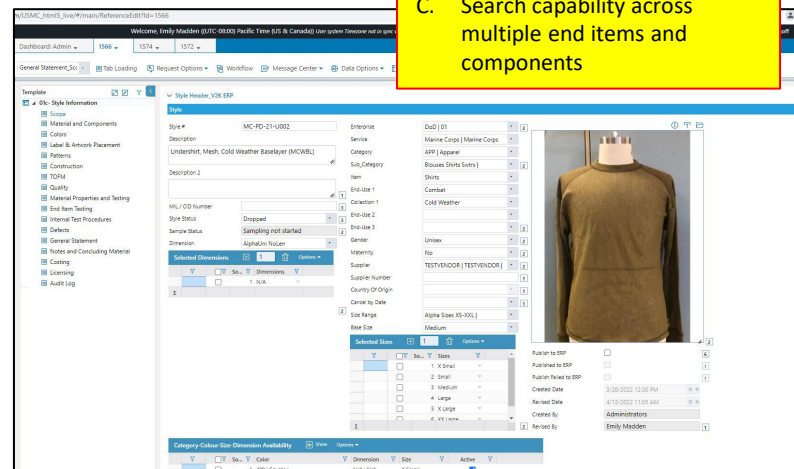


- A. Common DoD terminology sectional format, information in paragraph format
- B. Minimal images or pictures
- C. Unable to search across multiple documents

Future

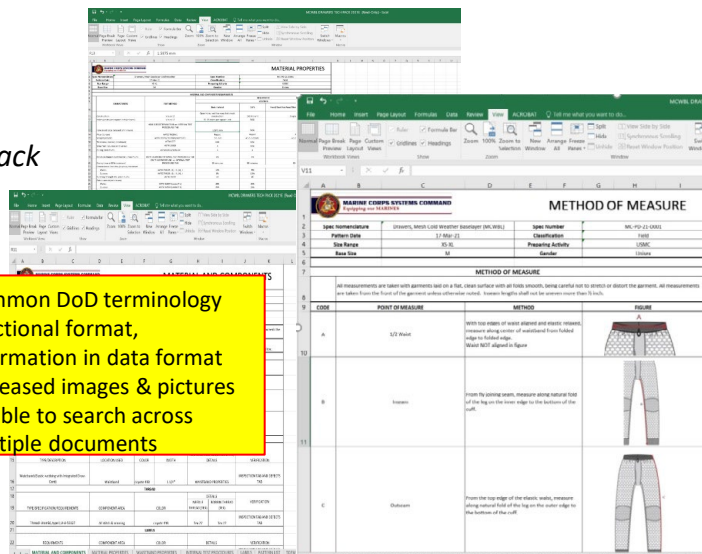
Tech Pack (Database)

- A. Common DoD terminology, functional format, information data / library format
- B. Increased images or pictures depending on functional area
- C. Search capability across multiple end items and components



Interim

Tech Pack (Excel)



- A. Common DoD terminology functional format, information in data format
- B. Increased images & pictures
- C. Unable to search across multiple documents



SIZE STANDARDIZATION/ SIZE MODERNIZATION:

- Contract awarded July 2023 for extended sizing (20-26) for female sailors
 - Size standardization tools (fit forms, block patterns, 3D avatars, body growth and garment grade)
 - Phase I complete Nov 2023 – fit type proposal
- National Security Innovation Network (NSIN) - Azimuth Course at University of Rhode Island
“ Past, Present and Future of Uniform Sizing Naming Conventions for the Department of Defense”

NAVSUP NAVY LOGISTICS PRODUCTIVITY R&D:

- FY22/23 – Maternity Pattern Growth Analysis
- FY23/24 – Validating the Reduction of Size Blur with New Proposed Sizing System
- FY24 (6 months) – Block Pattern Implementation Strategy

ON-GOING SYNERGYSTIC EFFORTS:

- Participation in multi-service block pattern validation
 - Army – JBLM, Washington and Ft. Liberty, North Carolina
Numeric blocks female warfighters, alpha blocks - male and female warfighters
 - USAF – Eglin Air Force Base, Florida
Alpha blocks - male and female warfighters

CONTACT INFORMATION:

Dr. Brianna Plummer

Supervisory Textile Technologist, Design & Testing Laboratory Group NCTRF, Mobile: 508-397-4265

Brianna.l.plummer2.civ@us.navy.mil



AF Uniform Office Joint Sizing & Fit

JAPBI Nov 2023

Tracy Roan
Air Force Uniform Office
Clothing Designer
tracy.roan.1@us.af.mil



Joint Sizing & Fit Progress Air Force Maternity Sizing



AFLCMC... Providing the Warfighter's Edge

- Development of 3 Maternity programs provided ability to test/ and validate maternity sizing
- Shared maternity patterns with Sister Services



Maternity Service Dress Ensemble (MSDE)



Maternity Advanced Aircrew Uniform (M-A2CU)



Maternity Flight Duty Uniform (MFDU)



Joint Sizing & Fit Progress

Air Force Alpha Sizing

AFLCMC... Providing the Warfighter's Edge



Fit Assessment & Evaluation

- **Assessed and evaluated three (3) utility uniforms on the same individual**

1. Army Combat Uniform (ACU)

2. Improved Hot Weather Combat Uniform (IHWCU)

3. Advanced Aircrew Combat Uniform (A2CU & A2CU-F)

➤ **Total Number of Participants= 297**

✓ **202 Females**

✓ **93 Males**

- **Analyzed the data and presented results to Army**
- **NEXT STEP: share results/recommendation with Joint Service IPT as part of effort to standardize the fit**