



# Research and Development STRATEGIC DISTRIBUTION & DISPOSITION (SDD)



#### **DLA'S TRANSFORMATION IMPERATIVES**



**Build Organization Agility Through Our People and Culture** 

Calibrate Resilient And Responsive Logistics Solutions On Support Of Military Readiness

Enhance Support To Integration Deterrence Across The Continuum Of Conflict In Contested Logistics Environments

Lead Logistics Interoperability Across The Department, Allies, Whole Of Government, And Industrial Base

#### **OBJECTIVE**

To advance innovation, science & technology into DLA Distribution and DLA Disposition networks through research & development of technology solutions. This includes a focus on Automation, Asset Visibility, and Circular Economy.

### AUTOMATION

Warehouse automation is necessary to enhance efficiency, reduce cost, improve safety, and enable DLA to meet the evolving demands of the warfighter.

#### **PROBLEM AREA'S**



#### **ASSET VISIBILITY**

Requires the capability to track and monitor assets, such as inventory, equipment, and transportation vehicles, throughout the entire DoD supply chain process.



#### CIRCULAR ECONOMY

DLA has a large potential to transition from their largely linear materiel disposal models and leverage circular economic models to inject materiel back into DoD supply chain.

#### **INNOVATION & TECHNOLOGY**

- Identify technologies solutions to solve the problem areas above.
- R&D support includes market research, requirements analysis, research & development, feasibility studies, prototype development, test & evaluation, and Business Case Analyses (BCAs).

#### STRATEGIC THRUSTS

#### **Support DOD Modernization Priorities**

- 5G Connectivity
- Automation & Robotics
- Artificial Intelligence
- Integrated Network of Systems of Systems
- · Cybersecurity Controls





Continue driving innovation by managing science & technology for DLA Distribution & Disposition

#### Support DLA Strategic Plan

DLA's Mission of sustaining warfighter readiness DLA's Vision of being innovative Modernize Acquisition & Supply Chain Management





## Research & Development SDD



#### THE CHALLENGE

The SDD program challenges include legacy capabilities that are inadequate for emerging worldwide distribution and disposition requirements. This results in inefficient business processes that are labor intensive, long lead times in completing tasks, human error and inaccurate data, and high costs in labor and operations. This compromises the DLA logistics response to the warfighter.



#### THE SOLUTION

Develop technology solutions for a DLA Smart Warehouse to optimize distribution and disposition operations and effectively and efficiently sustain warfighter readiness. The Smart warehouse is a system of systems composed of Robotics, Modeling & Simulation, Sensor IoT, Cybersecurity controls, the cloud, Augmented Reality, 5G Connectivity, and AI (predictive analytics).



#### WARFIGHTER READINESS

#### THE BENEFITS



Optimization of DLA Distribution and DLA Disposition Centers



Automation of DLA Distribution and DLA Disposition business processes to enhance efficiency, reduce cost, and improve safety.



Enhance and improve DLA's logistics response to the warfighter

#### INDUSTRY AND WHOLE OF GOVERNMENT PARTNERSHIPS

- FFRDCs
- ERDC
- NAVSUP
- Industry
- MARCOLOG
- UARC
- NIWC
- OUSD R&E



https://www.dla.mil/Information-Operations/Research-And-Development/

#### **ACCOMPLISHMENTS & ONGOING EFFORTS**



Strategic partnership w/ OUSD R&E, NAVSUP, & MARCOLOG to establish the DLA 5G Smart Warehouse Test Bed.



Strategic partnership w/ DOD Sponsors Research Center (FFRDCs/UARCs)



Establish addendums (User Requirements) for Distribution Modernization Program (DMP)



Establish 5G Integrate Product Team (WIPT) for project collaboration



Engage Industry for effective and affordable solutions



Integrate DOD System Engineering concepts for a system of system 5G Smart-warehouse