



DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY



Evolving Parts Standardization

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Report Documentation Page

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Scope of DLA Customer Support

- Supports nearly 1,600 weapon systems
- Provides 84 percent of all Military Services' repair parts
- Managing 4.8 Million national stock numbers via eight supply chains
- Processes an average of 230,000 requisitions a day
- Awards an average of 11,000 contract lines a day
- Provides 100 percent of:
 - Fuels
 - Food
 - Clothing and Medical Supplies
 - Construction Material
- Worldwide Presence:
 - More than 25,000 civilian, active duty, and reserve employees
 - 28 countries and 48 states (except Vermont and Iowa)

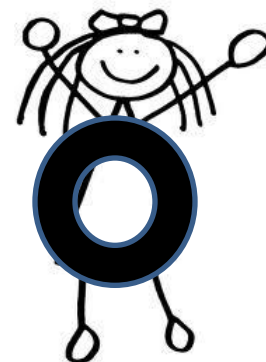




Parts Proliferation Problem

What do 180,000 connectors, 423,000 fasteners, and 44,000 O-rings have in common?

- DLA managed items in the Federal catalog
- 70% to 80% are not routinely purchased
- Vast majority have very limited description
- Thousands identified with non-manufacturer part numbers
- Hundreds of exact or functional duplicates





Impact of parts proliferation on Acquisition

Small quantity, infrequent, unpredictable demand

Inventory costs

Poor supplier response

Product prices

Unfilled customer orders

Production stoppages, inoperable systems

Readiness impact

Number of Acquisitions



Ability to impact parts proliferation

- Limited at DLA
 - Legacy systems with MIL-STD-965 requirements
 - Few parts review for MIL-STD-3018
- Standardization decisions happen during design
 - System integrators, subsystem manufacturers, & Service design control activities
 - Help designers use existing parts when appropriate
- Body of data is huge where there are part proliferation issues
- Item reduction is not effective



Three Pilot Projects

What we've learned . . .

- Parts proliferation is not government unique
- We can
 - collaborate with industry SMEs to identify significant characteristics for parts selection
 - share data across DoD & company lines to develop more complete item descriptions
 - identify exact duplicates, functional equivalents, and additional sources of supply
- The technology is a “game changer”



Current State

NORTHROP GRUMMAN

CAGE: 00779
Part No: 1-480698-0
CONNECTOR, PLUG, MATE N
LOCK, 2 POSITION

Tyco Electronics

Universal MATE-N-LOK Connector
Part Number 1-480698-0

EU RoHS/ELV Compliant



TYCO ELECTRONICS
PRODUCT CHANGE
NOTIFICATION E-07-02543

JAMECO ELECTRONICS

Connector Housing Receptacle 2
Position 6.35mm Straight Loose Piece
Manufacturer AMP
Catalog no. 526731
Price: \$0.25
Shipping: 3 days ARO

**INFORMATION INTEGRATION
FROM THE SUPPLY WEB**

Defense Supply Center Columbus

CONNECTOR, RECEPTICAL,
ELECTRICAL,
PLUG HOUSING
Drawing No. 87097-001

45 DIFFERENT
WEAPON SYSTEMS
FROM MULTIPLE
SERVICES

Defense Logistics Information Service

CONNECTOR BODY, PLUG, ELECTRICAL
NSN 5935010961872

DOD EMALL GSA Advantage!

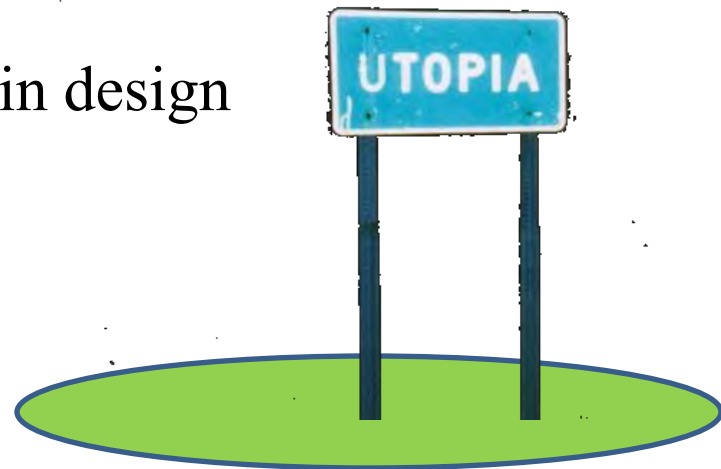
Newark Electronics Allied Electronics John B Ruby





Ideal Future State

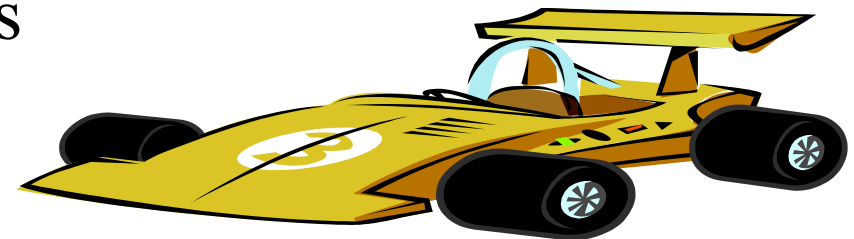
- Single database of connectors shared & maintained by DoD and defense industry
- Defined set of core characteristics
 - Commonly understood
 - Significant for parts selection
 - Values populated for items in the database
 - Associated information on usage, availability, price, environmental characteristics
- Sufficient variety of items for flexibility in design selection
- Business rules for access and sharing





Time for a new model . . .

- More open data sharing for targeted commodities
- Access to more complete item information for parts selection
- Standardization by natural selection
 - Performance characteristics
 - MIL-STD-3018
 - Availability, usage on other systems, environmental preferences





Next Steps

DoD Connector Standardization Working Group

- DSPO letter to Standardization Executives
- Common use connector parts lists
- Data sharing infrastructure
- Process for selection of future preferred connectors

DLA R&D project on supporting infrastructure

- Database
- Ontology
- Role based security
- Data translation
- Communication channels
- Workflow management