

Logistics - Our Military's Backbone

NDIA 33rd Annual National Logistics Symposium

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Strategic logistics questions

Is our logistics system ready to support future military operations?

Do we have the right technologies, procurement strategies and resources to succeed?

Can we fulfill our mission of protecting Americans at home and American interests abroad?



Definition

“Logistics” is derived from the Greek adjective *logistikos*, meaning “skilled in calculating”

Process of planning, implementing and managing the movement of products and information from one point to another

Uncertain conditions

Many considerations



Need for Action

Budget predictability

Performance based outcome contracting

Technology innovations

Environment

15 years of hybrid war led to logistics transition

Hard to predict the future from the past

Near-peer competitors investing and posturing

Intense & trans-regional threat environment with “big 5”



North Korea



China



Russia

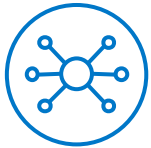


Iran



ISIL

Logistics challenges & needs



Challenges

Multi-domain warfare
Most supplies carried on ships
Great distance from battle
Contested environment
GPS / communications denied
Anti-access / Area-denial
Cyber security
Wide range of missions



Needs

Seamless integration
Global and mobile
Coalition partners
Joint system
Position quickly
Complete promptly
Reduced footprint
Innovative technologies

Budget

Funding surety

Predictability for full year planning

Logistics investments

Budget prior to 29 April

Tactical plan to achieve
Administration priorities





Opportunity

Effective maintenance and operations support

Reducing the battlefield logistics demands

Improved procurement to fully leverage public-private

- Performance-based outcomes
- Drive innovation and incentivize performance
- Key enabler for reduced budgets, increased logistics work and advanced technologies



Public-private partnerships

Long existed in infrastructure

Enabler for Performance Based Logistics

- Commercial aviation “power by the hour”

Relationship between organic and one or more private entities

Depot maintenance focus

3 types: workshare, direct sales, lease

Dependency upon commercial workforce



New Public-private partnerships

Training

- Airframe and power plant mechanics
- Air traffic controller
- Other advanced education

Military – commercial opportunities

- Mobile refinery
- Modular nuclear reactors

Innovative Technology Needs

Reduced logistics demand

Enhanced mobility solutions

Decision support systems

More reliable equipment with reduced
maintenance

Joint systems and processes

Cyber resiliency



Demand reduction



Fuel, water, ammunition, power and energy

Water collection, purification and conservation technologies

Fuel used to power vehicle engines and for base power

- New and efficient engine designs, hybrid and electric vehicles
- Power distribution, micro and smart grids, and alternative energy sources

Ammunition

- Precision munitions and directed energy
- Transportation and packaging

Satisfy demand at the point of need

Additive and 3D manufacturing to make parts in the field

Autonomous vehicles that automate military operations



Mobility

- Improve getting into theater and within theater
- Travel by sea critical
- Agile prepositioned stocks
- Ground and air autonomous vehicles

Decision Support Systems

Actionable intelligence needed for real-time decision making

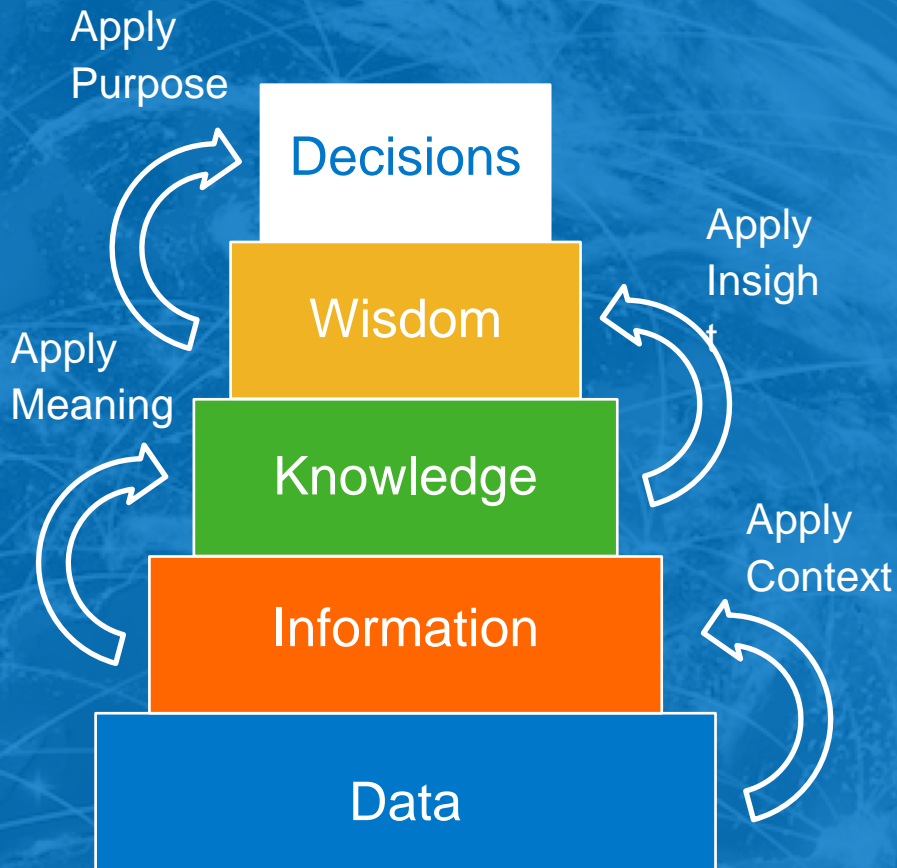
Modeling and simulation and analysis tools

Examples

- Inform individual end users if the items they request are available at time of order
- Quantify impacts of platform and equipment decisions
- Integrated database to synchronize depot repair operations and improve visibility

Better parts forecasting and reduced depot repair time

Shared military / industry data solutions



Equipment



Improve reliability and reduce maintenance

Condition-based maintenance

- Based on condition not given schedule
- Sensors assess health of components
- Connect directly to supply chain for advanced replacement scheduling

Link between new system operational requirements and their logistics loads and life cycle costs



Joint

Improved operational efficiency

Joint supply support system

Agile and flexible resource allocation

Interoperable Enterprise Resource Planning systems

Cyber



Threats

All logistics domains

Supply chain

Networks

Enterprise Resource Planning

Connected devices



Solutions

Comprehensive system approach

Risk management framework

Network security technologies

System architecture



Protect Americans at home and our interests abroad

Budget stability and logistics funding surety

Reform government contracting through public-private partnerships and performance-based outcomes

Apply innovative technologies

Thank You
