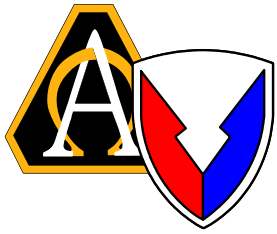


# Army TARDEC DMSMS Program



# ***TARDEC DMSMS***

*Our mission is to maintain cognizance of Diminishing Manufacturing Sources & Material Shortages (DMSMS) policy, procedures and current issues in support of our customers. An expertise in Reverse Engineering practices is a critical success factor for the team and is a known “value added” for customers.*

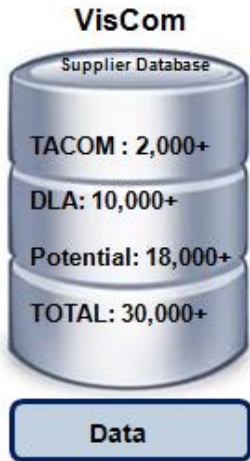
## Diminishing Manufacturing Sources & Material Shortages (DMSMS)

Old Way



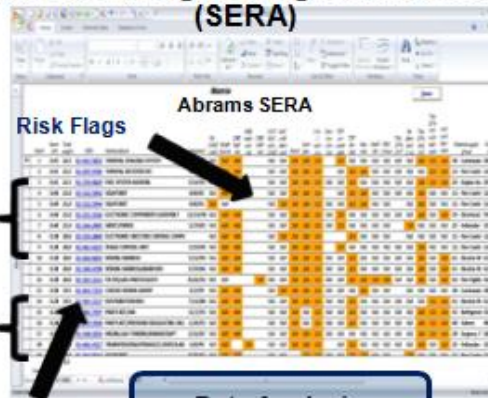
Reactive (Commodity Driven)

New Way



Proactive (Weapon System Driven)

Sustainment Engineering Risk Assessment (SERA)



19,881 NSNs

Data Analysis

Risk Mitigation

SD-22 Guidebook

- Approved part
- Life of need buy
- Repair, refurbishment, reclaim
- Extension of production
- Substitute part
- Develop new item or source
- Redesign
- Reverse Engineering / MBETDP
- Tech Insertion

-VE and Cost Reductions

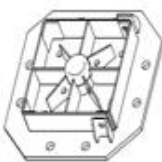
Risk Mitigation Board

AAFARS Engine



Reverse Engineering

IRB Base



Circuit Card



Repair or Redesign

LRU



Additive Manufacturing – Spindle Idler Support



Repair, Refurbishment, Reclaim

MMC Brake Drum



Redesign

COGS Hydraulic Valve



Risk Mitigation Options



## ***From DOD Defense Standardization Program Office (DSPO) SD-22 DMSMS Guidebook:***

- “Because *system* life cycles are longer than *technology* life cycles, Diminishing Manufacturing Sources and Material Shortages (DMSMS) – **Obsolescence** - issues are inevitable. DoD cannot afford to be **reactive** in this area—this leads to a combination of **schedule delays, readiness degradations, and higher cost.**”
- “Resources devoted to proactivity lengthen the window of opportunity to take corrective action. Given earlier warning, there will be more low-cost options available, **improving cost-effectiveness and timeliness of the solution.** This is the primary theme of the better buying power initiatives—better value for the warfighter.”

*Customers benefit from a proactively managed obsolescence program because early detection and reaction minimizes cost... But also.....*



**From DOD DSPO SD-22 DMSMS Guidebook:**

Obsolescence Solutions (in order of preference)

- Approved Alternate
- Life of Need Buy
- Repair, Refurbishment, Reclamation
- Extension of production support
- Simple substitute
- Complex Substitute
- Development of a new item or source
- Redesign – Complex/System Replacement
- Redesign – Next Higher Assembly

**Impact**

Cost



Readiness

Less Adverse

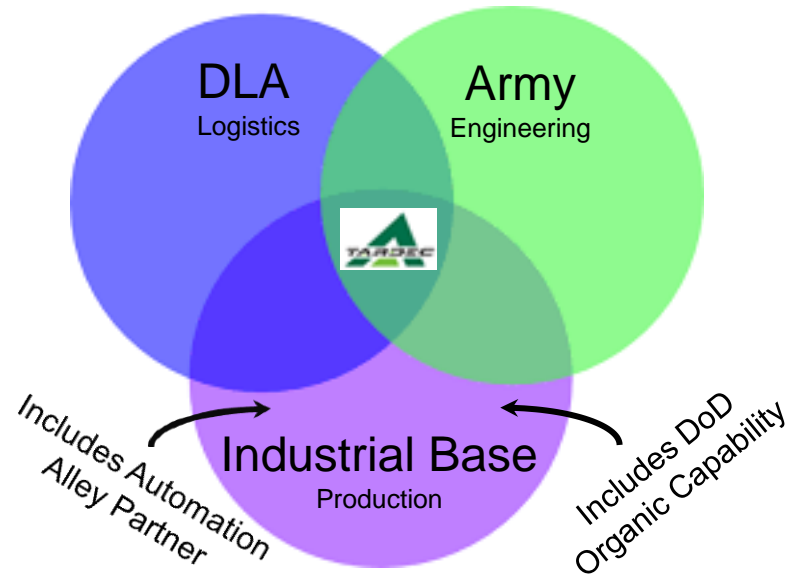
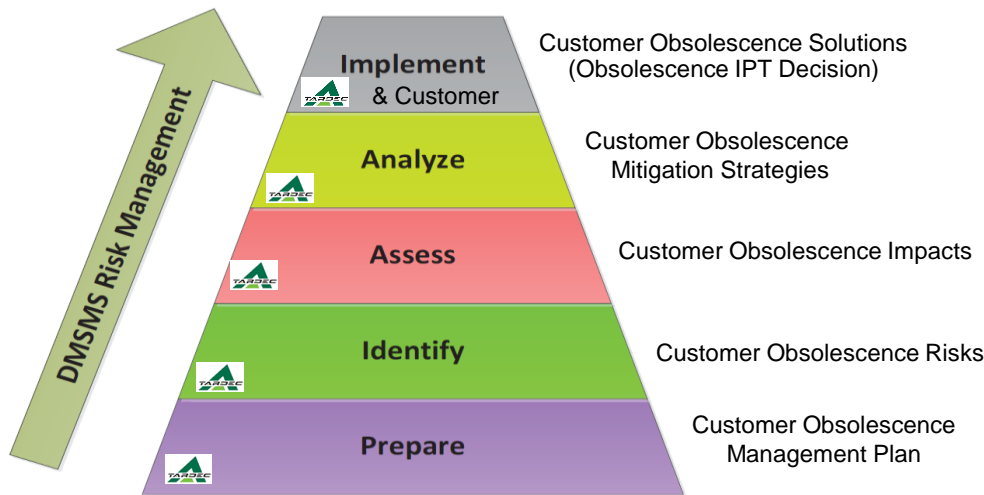


More Adverse



*Severity/Complexity of the solution plays a part as well, with Reverse Engineering typically being the most costly, complex and time consuming. So.....*

TARDEC uses **proactive** principles as described in the DOD DSPO SD-22 DMSMS Guidebook to **identify issues** resulting from obsolescence, loss of manufacturing sources, or material shortages; to **assess** the potential for negative impacts on schedule and/or readiness; to **analyze** potential mitigation strategies; and then to **recommend implementation** of the most cost effective strategy.



*A “holistic” customer specific Obsolescence approach with data driven analysis including the logistics, engineering and industrial communities, is required to “early-identify” potential Reverse Engineering efforts.*



Diminished Manufacturing  
Sources and Materials Shortages  
(DMSMS) Program

Register your company today at  
[www.dmsms-tardec-army.com](http://www.dmsms-tardec-army.com) or call  
(800) 427-5100 for more information.





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