

DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY

The seal of the Defense Logistics Agency is centered in the background. It features a bald eagle with wings spread, perched on a shield with red and white vertical stripes. Above the eagle is a banner with the word "LOGISTICS". The shield is set against a blue globe with white stars. The words "DEFENSE" and "AGENCY" are written vertically on either side of the shield.

Warstopper Material Supply Chain Risk Assessments

May 22, 2012

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Agenda

- Purpose
- Warstopper Program
- Warstopper Material Supply Chain Risk Assessment



Purpose

Performing supply chain
risk assessments
for
DLA Warstopper items



Warstopper Program

Background

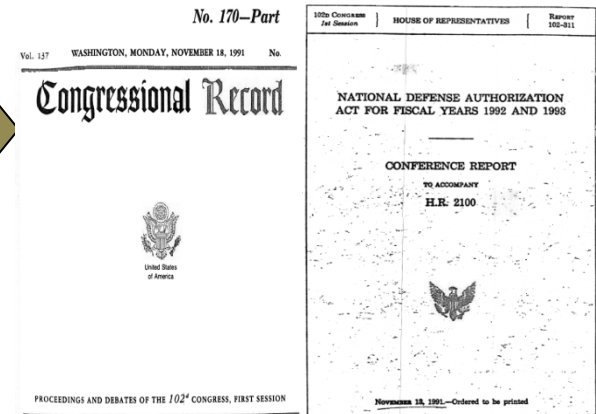
Pre-Desert Storm
Industrial Base
Concerns

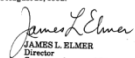


Post-Desert Storm
Congressional Interest



Leading to “War Stopper”
Language in HR 102.311
and NDAA for FY92 & 93



DEPARTMENT OF DEFENSE DIRECTIVES SYSTEM TRANSMITTAL		
NUMBER 4005.1 (Cancellation) 4005.3 (Cancellation)	DATE November 2, 1992	DISTRIBUTION 4000 Series
ATTACHMENTS None		
INSTRUCTIONS FOR RECIPIENTS		
CANCELLATION NOTICE The following DoD issuances were rescinded by Deputy Secretary of Defense memorandum, "Industrial Capabilities Critical to Future Defense Needs," February 21, 1992: DoD Directive 4005.1, "Industrial Preparedness Program," November 26, 1985 DoD Instruction 4005.5, "Industrial Preparedness Planning," April 18, 1985		
EFFECTIVE DATE The above cancellations were effective August 21, 1992.		
 JAMES L. ELMER Director Correspondence and Directives		

Cancellation of
“Industrial Preparedness
Program” DoD 4005.1



DLA Warstopper Program
Started 1993



Warfighter Readiness Solutions

Science & Technology

- Innovation in Products

Title III

- Establish Capability

War Reserve Material

- War Reserve items

DMSMS

Diminishing Manufacturing Sources and Material Shortages

- Manage obsolescence

DLA Strategic Materials Transaction Fund

- Stockpile, buffers

Working Capital Fund

- DLA Procurement Solutions

Warstopper

- Industry/Business Solutions
- Mitigate surge constraints
 - Items in Sustainment

Manufacturing Technology

- Lead Time Reductions
- Lean Manufacturing

DPAS

Defense Priorities & Allocations System

- Establish Priority



Warstopper Program Criteria

Item can be included in the Warstopper Program if it has –

- *Mission Characteristics**:
 - Equivalent to congressionally identified items;
 - Lifesaving Class VIII or personal protection Class II items; or
 - Class IX or Class III items capable of stopping a strategic warfighter capability.
- *Demand characteristics** with a validated War Reserve Requirement or surge demand in wartime.
- *Production characteristics** that result in limited industrial capability to meet wartime requirements.

* DLA Instruction 1212, Industrial Capabilities Program – Manage the Warstopper Program



Warstopper Program

Industrial Base Preparedness

How The Program Works (Government Investment):

Benefit To The Industry

- Partner with manufacturers, distributors and Prime Vendors to gain access to commercial inventory
- Stage vendor managed raw material or long lead time components
- Provide industrial equipment (not common)
- Provide lean six-sigma analysis to maximize vendor capacity
- Award industrial base maintenance contract to vital domestic industry (not common)

Past Investment Items:



Mission:

Government Investment needed when readiness demand is higher than the commercial industry is willing to invest.





Warstopper Buffer Solution

Examples

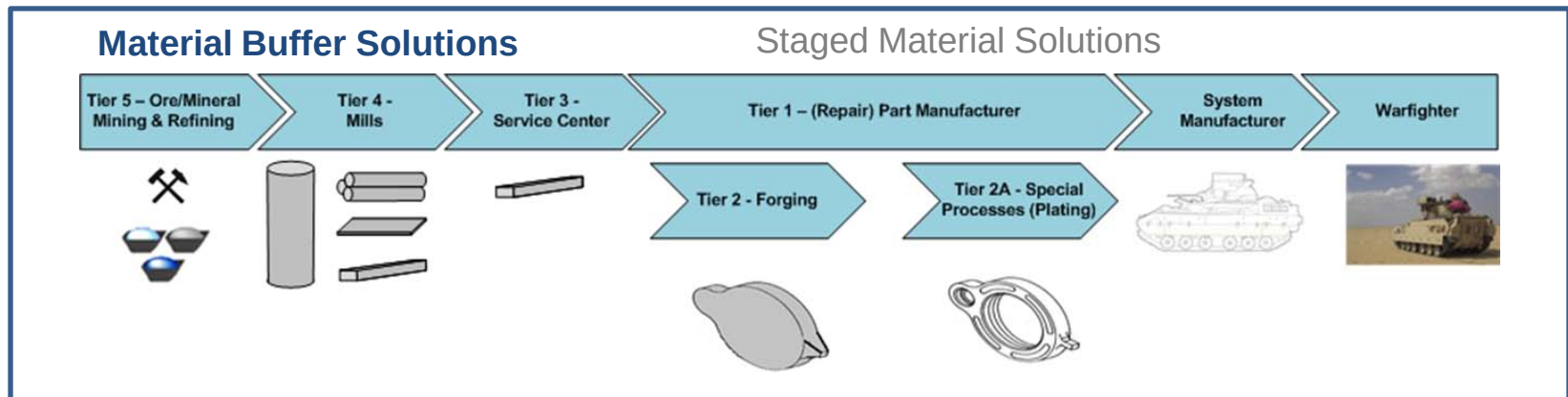
- Specialty Steel:
 - Grade 300M for landing gear components and combat vehicle torsion bars
 - Grade M50 for bearings
- NOMEX® Fiber – Fire retardant clothing
- Geotextiles – Protective barriers (e.g., HESCO Bastion)
- Aluminum Extrusions – AM2 used for aircraft runway and parking surfaces



Warstopper Material Buffer Solutions

Lessons Learned

- Material buffer solution should be:
 - designed to have the highest impact and the most flexibility (typically tier 3-5)
 - self-executing to easy and rapid access to material when needed
 - Business-to-business transactions to maintain material pedigree and all warranties
- Consider global material supply chain risks



Establish a material supply chain risk assessment process based on commercial practices.

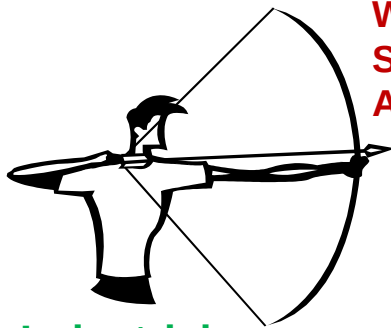


WARSTOPPER MATERIAL SUPPLY CHAIN ASSESSMENTS



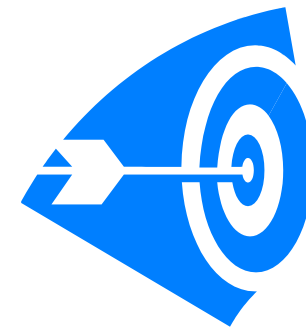
Development Timeline

ID	Task Name	Start	Finish	Q4 11			Q1 12			Q2 12			Q3 12			Q4 12			Q1 13			Q2 13	
				Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
1	Supply Chain Risk Assessment Process Development (R&D Contract)	10/17/2011	8/9/2012																				
2	Identification of materials Important to the Agency (DLA Industrial Specialist)	10/17/2011	9/28/2012																				
3	Implement	10/30/2012	10/15/2013																				



**Warstopper Material
Supply Chain Risk
Assessments Process**

**Industrial
Specialist**



**Materials Important to
the Agency**



Risk Assessment Development

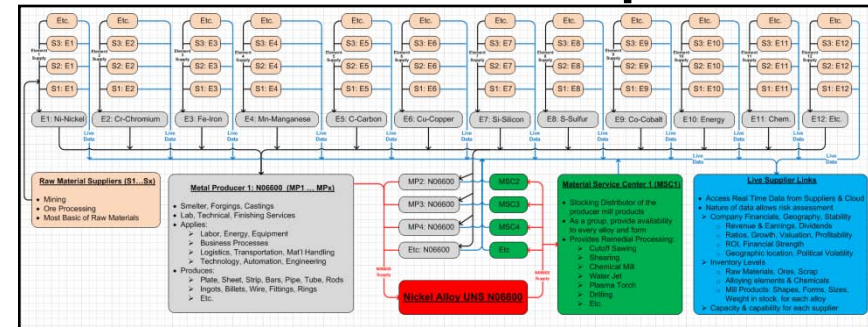
- Perform market research to identify:
 - Commercial best practices for assessing risk
 - Global market place business intelligence data sources
- Establish a robust baseline risk assessment process
 - A repeatable process for assessing:
 - Input elements and compounds (mining, refining)
 - Output materials (specification, grade, form, size)
 - Warstopper requirements vs. market place



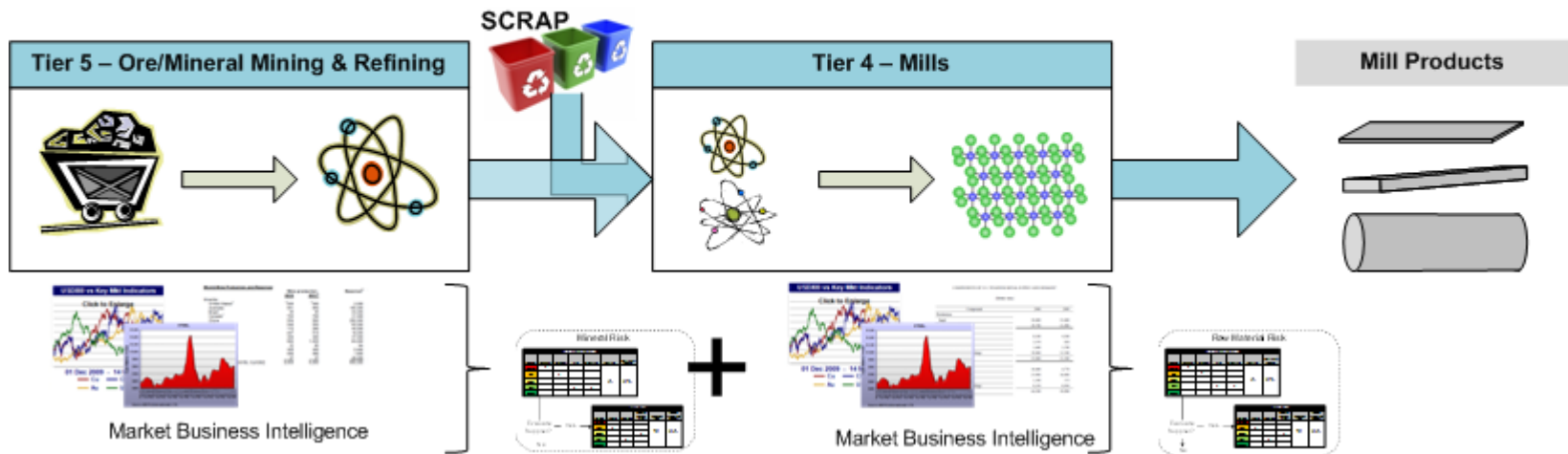
Risk Assessment Approach

- Recognized the supply chains are complex

- Competition for input materials and/or production capacity
- Required production qualifications
- Production and material technology
- Increased use of scrap vs. virgin material

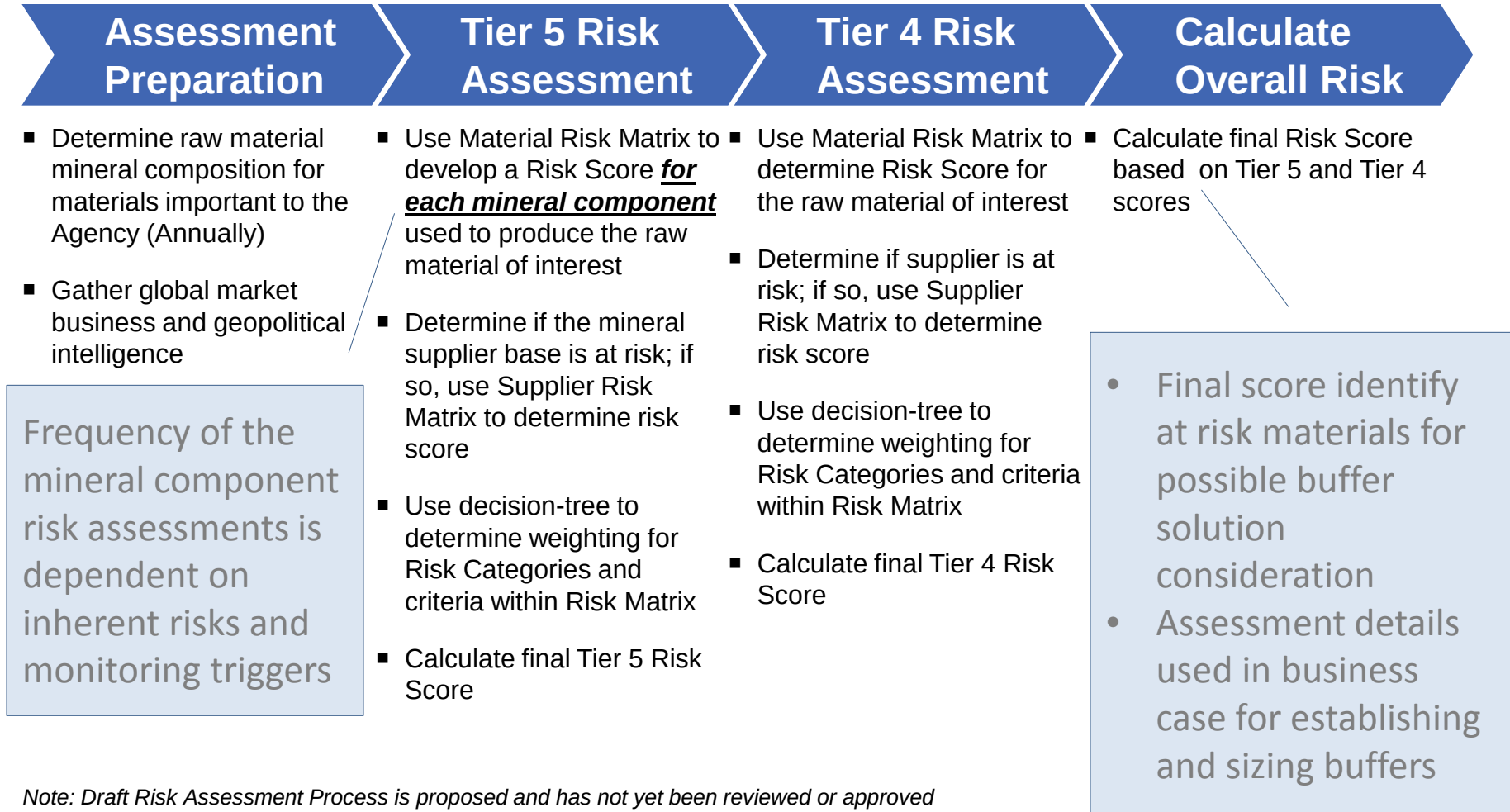


- Assess supply chain tiers 4 and 5





Risk Assessment Process





Risk Matrix

Material Risk Categories				
Risk Level	Geopolitical	Price Volatility	Supply	Infrastructure
Very High	Criteria • Political Risk • Commercial Risk • Economic Risk Data Sources • Dun & Bradstreet • A.M. Best • Coface • Economist Intelligence Unit	Criteria • Price Indices • Price Trends Data Sources • S&P Indices • InfoMine Index • InfoMine Trends	Criteria • Global Production • U.S. Production • Scrap Availability Data Sources • USGS Reports • IBISWorld Report • Other Industry Reports	Criteria • Access to Energy • Access to Water • Access to Transportation Data Sources • Internal Energy Agency • UN Energy • CIA World Factbook • World Economic Forum
High				
Medium				
Low				
Very Low				

Supplier Risk Categories			
Risk Level	Financial	Market Share	Supply
Very High	Criteria • Credit Rating • Credit Score • Quick Ratio • Current Ratio • Other Common Ratios Data Sources • Dun & Bradstreet • Supplier 10K	Criteria • Market Share in A&D • Capacity for A&D • Total Sales to A&D Data Sources • IBISWorld Reports • Supplier provided information	Criteria • Demand Aerospace & Defense • Demand from Other Industries Data Sources • IBISWorld Reports • Supplier provided information
High			
Medium			
Low			
Very Low			

Note: Draft risk categories and criteria are not exhaustive and “banding” for risk levels is not yet defined



Risk Calculation (NOTIONAL EXAMPLE ONLY)

Tier 5

Tier 4

Mineral Risk

Element/Compound Risk					
Risk Level	Geopolitical	Price Volatility	Supply	Infrastructure	Risk Score
Very High	X				25
High		X			
Medium					
Low			X	X	
Very Low					

Score

9

Evaluate Supplier?

Yes

Supplier Risk				
Risk Level	Financial	Market Share	Non-ADD Markets Supplied	Overall Risk Level
Very High				18
High	X			
Medium			X	
Low		X		
Very Low				

0.25

No

Mineral Risk

Element/Compound Risk					
Risk Level	Geopolitical	Price Volatility	Supply	Infrastructure	Risk Score
Very High	X				25
High		X			
Medium					
Low			X	X	
Very Low					

Score

8

Evaluate Supplier?

Yes

Supplier Risk				
Risk Level	Financial	Market Share	Non-ADD Markets Supplied	Overall Risk Level
Very High				18
High	X			
Medium			X	
Low		X		
Very Low				

0.25

No

Raw Material Risk

Element/Compound Risk					
Risk Level	Geopolitical	Price Volatility	Supply	Infrastructure	Risk Score
Very High	X				25
High		X			
Medium					
Low			X	X	
Very Low					

Score

7

Evaluate Supplier?

Yes

Supplier Risk				
Risk Level	Financial	Market Share	Non-ADD Markets Supplied	Overall Risk Level
Very High				18
High	X			
Medium			X	
Low		X		
Very Low				

0.25

No

Overall Risk Score

8



Next Steps

- Complete development of the supply chain assessment process for FY2013 cycle
- Industrial specialist will use process when:
 - Identifying at risk materials for buffer solution consideration
 - Building a business case for establishing buffers
 - Performing annual assessments on selected weapon system
- Periodically review risk assessment process
 - Add, modify or remove assessment criteria and risk weighting
 - Adjust data sources as required



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WARFIGHTER SUPPORT ENHANCEMENT

STEWARDSHIP EXCELLENCE

WORKFORCE DEVELOPMENT