



THE CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM: AN OVERVIEW

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December 6, 2013



The Chemical Biological Defense Program: Mission and Priorities

Mission: *Enable the Warfighter to deter, prevent, protect against, mitigate, respond to, and recover from CBRN threats and effects as part of a layered, integrated defense.*

What does this mean?

- We provide the means to the Warfighter and the Nation to defend against chemical and biological threats. **It is that simple.**

How do we do it?

- We provide the strategic funding oversight and priority of effort for our component partners across the full spectrum of technological development to field physical and medical capabilities and capacities.

We are uniquely positioned for this mission and these priorities because the Department of Defense has unique operational requirements, a global presence, and significant current and emerging threats



The Chemical and Biological Program: Our Vision and Goals

Vision: *A Department of Defense (DoD) that addresses CBRN threats and minimizes their effects.*

Equip the Force to successfully conduct military operations to prevent, protect, and respond to CBRN threats and effects

Prevent Surprise by anticipating CBRN threats and developing new capabilities for the Warfighter to counter emerging threats

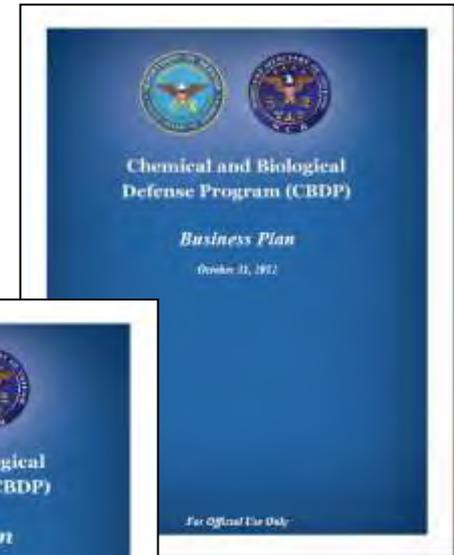
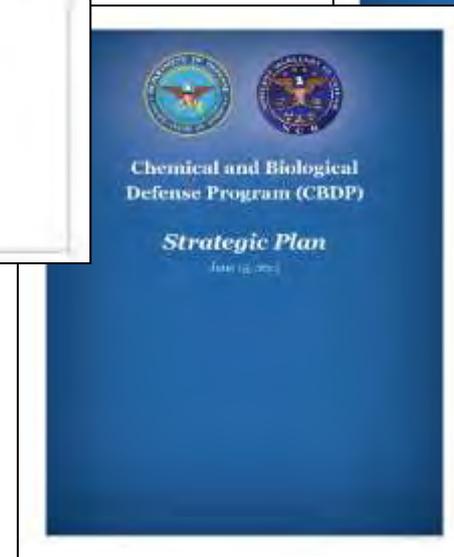
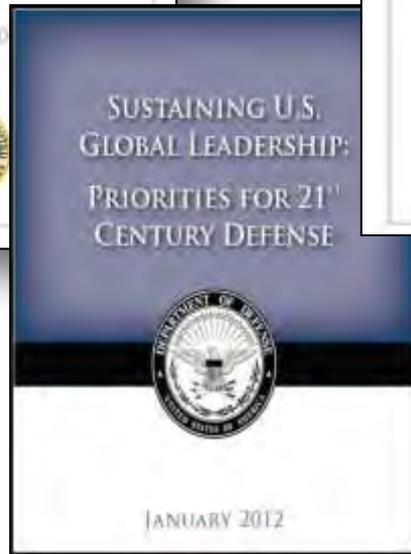
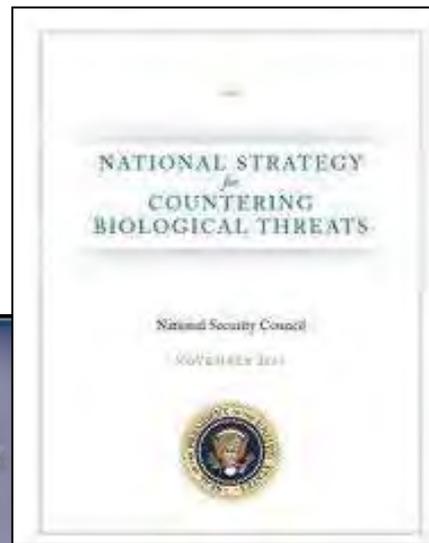
Maintain Infrastructure to meet and adapt current and future needs for personnel, equipment, and facilities within funding constraints

Lead the Enterprise to integrate and align activities to fulfil the CBDP mission

We must continue to lead the Nation's efforts to prevent, protect against, and respond to CBRN threats into the future.



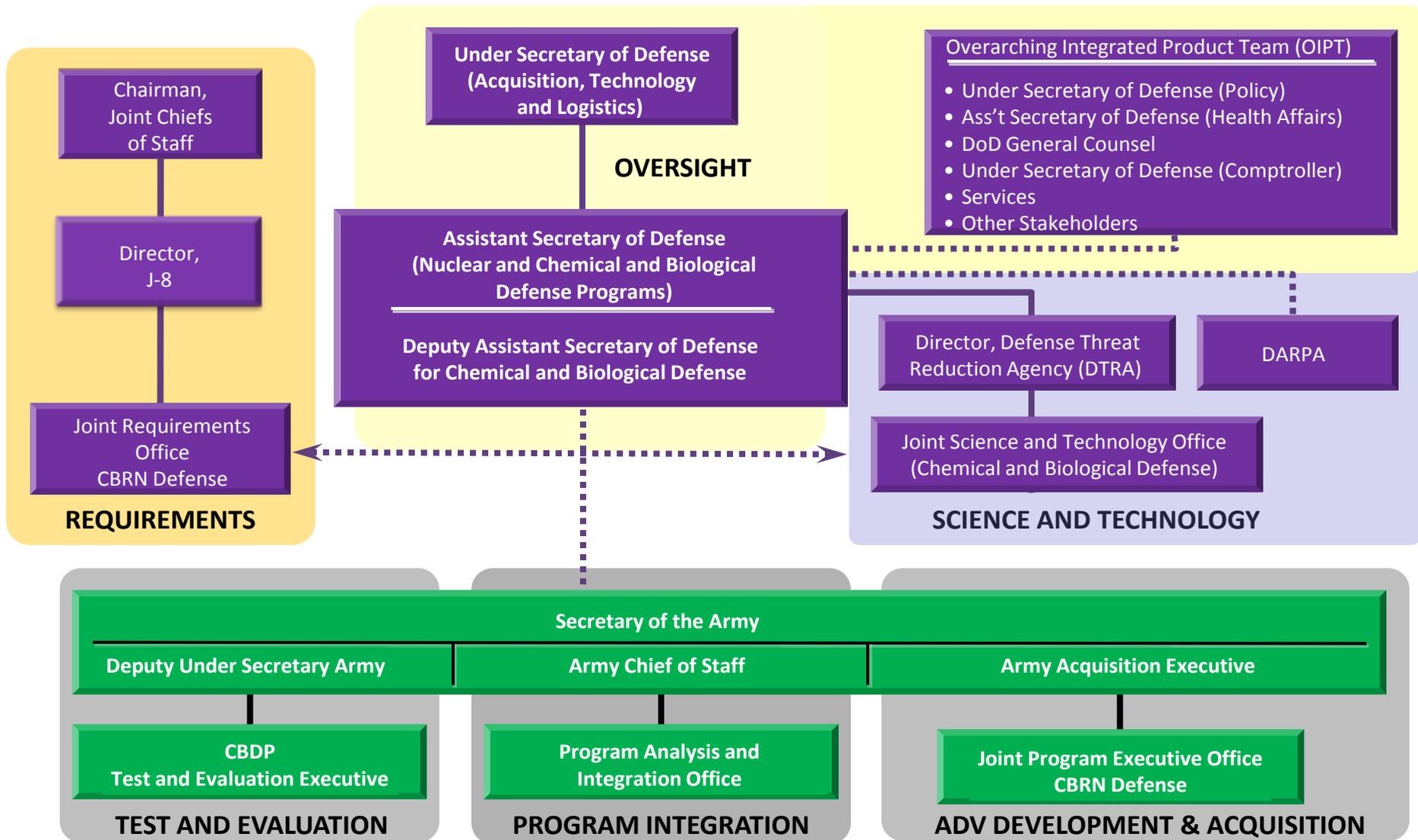
National and Defense Strategy: Driving Our Program



The CBDP is a key part of a comprehensive national strategy to prevent, protect, and respond to an evolving spectrum of 21st Century chemical and biological threats



Our Organization: What It Means To You





The Chemical Biological Defense Program: Our Component Partners

The Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense

- Supports establishing and defining the requirements for the program.

The Joint Science and Technology Office for Chemical and Biological Defense

- Manages and oversees the initial science and technology efforts across a wide area of efforts to transition to advanced development and procurement.

The Joint Program Executive Office for Chemical and Biological Defense

- The advance developer and acquisition procurement executive for the chemical and biological defense program.

The Chemical, Biological, Radiological, and Nuclear Defense Test and Evaluation Executive

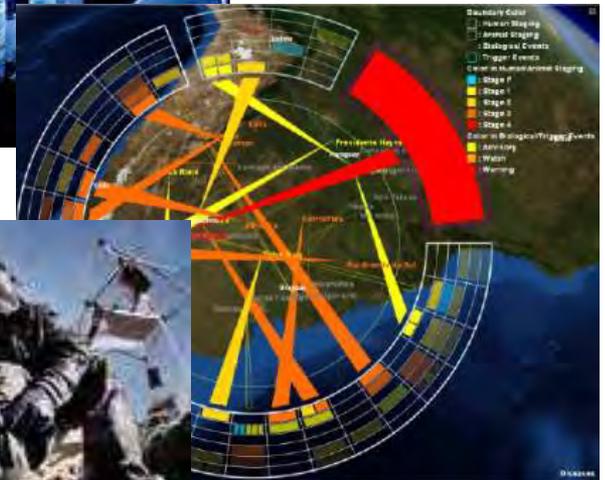
- Ensures adequate T&E for CBRN defense systems and provides T&E guidance for acquisition programs.

Your partner will depend upon what capability you offer along what stage of development and in what field of specialty.



The Chemical Biological Defense Program: Our Priorities

- Medical Countermeasures
- Diagnostics
- Biosurveillance
- Non-Traditional Agents and Emerging Threats





The Chemical Biological Defense Program: Our Objectives

- Establish medical countermeasures pipeline from requirements definition, through Research, Development, Test and Evaluation and FDA approval, to manufacturing and distribution.
- Develop synergistic, technologically advanced environmental surveillance and point-of-need diagnostic capabilities against CBRN threats to enable force protection decisions.
- Provide CBRN defense capabilities to support biosurveillance efforts and enable the warfighter to achieve information dominance in the CBRN domain.
- Integrate Non-Traditional Agent defense capabilities in future CBD systems.
- Develop and field suitable, effective, and affordable broad-spectrum CB detection capabilities to detect current and emerging CB hazards.
- Maintain critical capabilities and competencies, aligned with priorities, to rapidly develop, test, and field CBRN defensive capabilities to the warfighter.
- Implement risk-based planning and decision-making processes within the enterprise.



Questions?

UNCLASSIFIED



Joint Program Executive Office for Chemical and Biological Defense

CBRN Industrial Base Working Group (IBWG)

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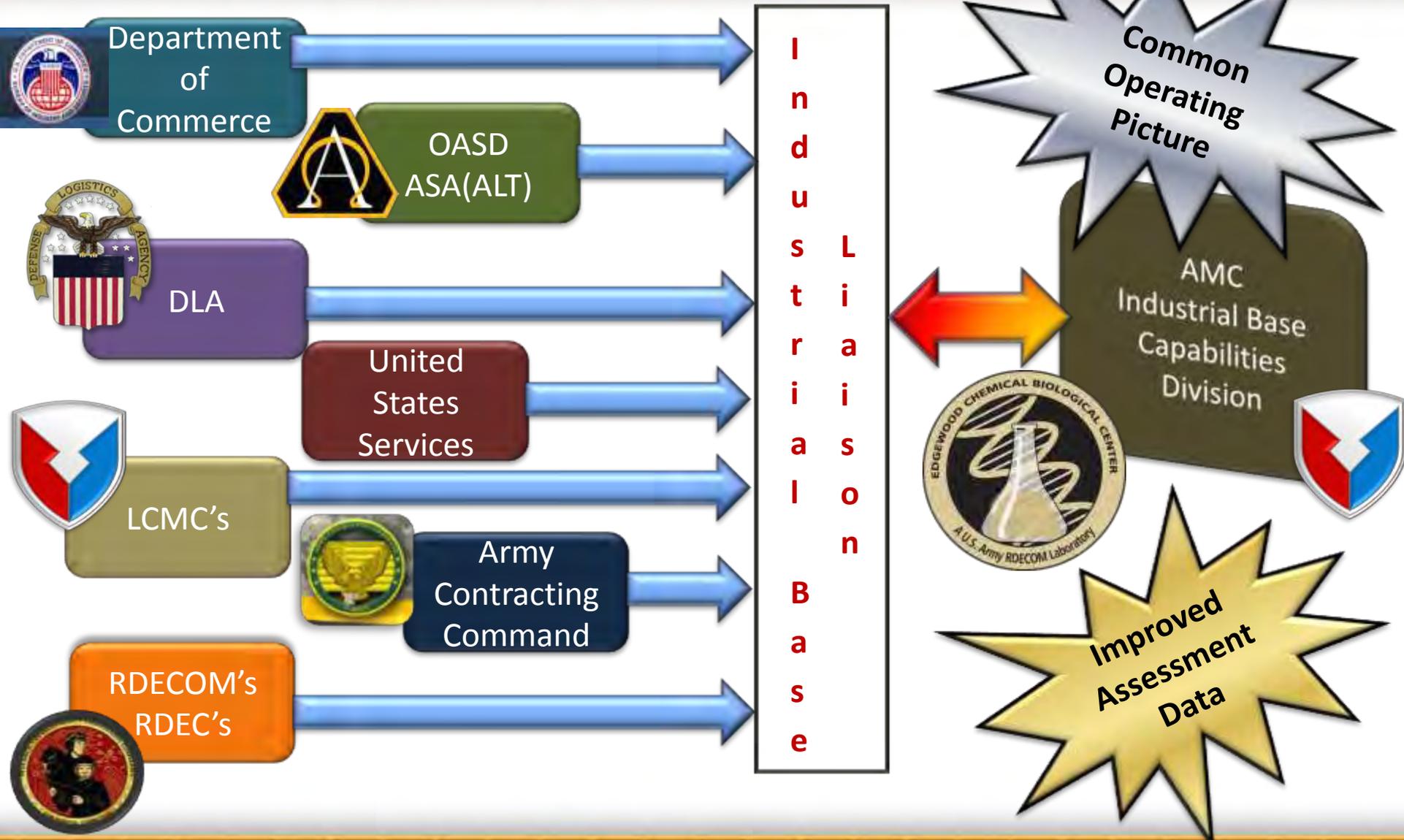
CBRN IBWG Overview/Mission

- Sub-group of Joint Logistics Advisory Council for Chemical and Biological Defense (JLAC-CBD).
- Role – Provide an integrated Joint forum to identify and address CBRN Industrial Base issues/concerns.
- Task – Perform Industrial Base analysis on CBRN systems in support of the JPEO-CBD, OSD, and the Joint Service's. Support JPM needs as required.

Work with the JPM life cycle managers



Organizational Relationships





IBWG Products

PRODUCTS PRODUCED	CUSTOMER
Annual CBRN IB Report (Continuous)	OSD, ASAALT, JPEO (JLSP)
CBRN Item Assessments (Continuous)	JPEO, Services, JPM's
Industrial Base Assessment System (IBAS)	JPEO, Services, JPM's
JPM Support/Market Surveys	JPM's
Organic Base Assessments (Integrated into Annual CBRN Report)	JPEO, OSD
Predictive Analysis/What if Analysis	JPEO, PAIO, JRO, OSD
Title III Report/Assessments	JPM, OSD Title III office
JLCMR Assessment Process	JPEO, Services, JPM's
Emerging Contaminants	JPEO, EPA, JPM
NORTHCOM CBRN IB Capabilities Assessment	NORTHCOM, JPEO, JPM Guardian
NEA Surge Analysis	JPEO, Services



IBWG Products - Annual CBRN IB Report

- Completed Jan/Feb of each year
- Summarizes IB efforts, studies, accomplishments, innovations, and continuing efforts
- Provides overarching assessments by capability area (Sense, Shape, Shield, and Sustain) and First Responder and Organic base assessment
- Assesses critical manufacturers/suppliers
- Provides recommendations for future IB efforts

CBRN Industrial Sectors	
Constructs	Assessments
• Sense	Amber
• Shape	Green
• Shield	Amber
• Sustain	Green
• First Responder	Green
• Organic	Amber

Overall: x GREEN

Key Manufacturers/Suppliers	Rating
Manufacturers	
• Company 123	Sensors and suites
• Company 123	Radiacs
• Company 123	Sensors and suites
• Company 123	Detection
• Company 123	Collective Protection
• Company 123	Filters and filtration systems
• Company 123	Masks and filters
• Company 123	Diagnostic
• Company 123	Medical
• Company 123	Medical/Vaccines
• Company 123	Decontamination
• Organic Industrial Base-Pine Bluff Arsenal	Organic Base
Critical Suppliers	
• Company 321	Individual Protection
• Company 321	Individual and Collective Protection



IBWG Products – Item Assessments

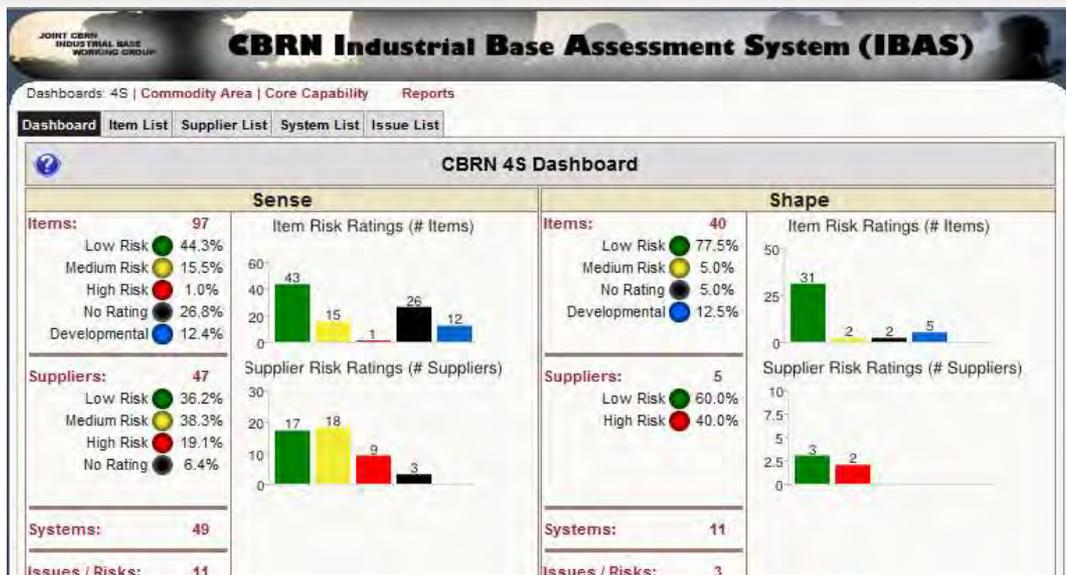
- 446 systems/Items assessed (over 1,000 NSN's)
- Criteria based assessments
 - Number of manufacturers (approx. 500)
 - Production status
 - Inventory, quality, lead times
 - PQDR's
 - Shelf-life
 - Foreign sources
- Includes Service and Defense Logistics Agency items
- Standardized - one source for CBRN IB information
- Increases visibility into the production base
- Provides configuration/standardization of CBRN IB Products - relational database populates other systems
- All assessments include a SME review
- The assessments can be accessed through the JACKS portal with a link to IBAS
- Item assessment reports can be downloaded through IBAS

Company	CAGE	Location	Last Contract	Production Status
READYONE INDUSTRIES, INC.	148C2	1414 ABILITY DRIVE EL PASO, TX 79936-7727 UNITED STATES	06/12/2012	Call
SOURCE FOR NATIVE AMERICAN PRODUCTS, LLC	5F9E8	PO BOX 798 INDIAN TOWNSHIP PRINCETON, ME 04860-0709 UNITED STATES	06/11/2007	Call
GROUP HOME FOUNDATION, INC.	09WV9	P.O. BOX 227 BELFAST, ME 04915-0227 UNITED STATES	06/07/2007	Call
CREATIVE APPAREL	908F3	PO BOX 206 BELFAST, ME 04915-0206 UNITED STATES	05/19/2006	Call

CBRN 45	Commodity Area	NSN	Item Name	Overall Risk
Shield	Individual Protection	6415014461163	JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) COAT, CHEMICAL PROTECTIVE, WOODLAND (SMALL/SHORT)	0
Shield	Individual Protection	6415014461169	JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) COAT, CHEMICAL PROTECTIVE, WOODLAND (SMALL/SHORT)	0
Shield	Individual Protection	6415014461200	JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) COAT, CHEMICAL PROTECTIVE, WOODLAND (MEDIUM/SHORT)	0
Shield	Individual Protection	6415014461238	JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) COAT, CHEMICAL PROTECTIVE, WOODLAND (MEDIUM/REGULAR)	0
Shield	Individual Protection	6415014461249	JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) COAT, CHEMICAL PROTECTIVE, WOODLAND (MEDIUM/LONG)	0



IBWG Products - IBAS



- Can be accessed through the JPEO-CBD Joint Acquisition Chemical Biological Knowledge System (JACKS) portal
- Can be sorted by commodity area or capability area
- Includes item and manufacturer/supplier assessments
- Issue/Risk ratings are reported for each system



IBWG Products – Market Surveys



- Full Market Research
- Joint Project Manager Support
- Detailed analysis of potential and current manufacturers
- Can be tailored to address specific IB issues
- Output:
 - Company overview
 - Financials
 - Current/future capabilities
 - Mergers and acquisitions
 - DoD contract history
 - Quality issues
 - Family trees
 - Risk mitigation recommendation

RECENT MARKET RESEARCH
<ul style="list-style-type: none">• CIDAS• Shelter Systems• JSAM• COTS Decon Shelters• Silk Producers• Air Breathing• Hoses Pressure Regulators• Sensors



IBWG Products – Organic Base Assessment

- Mission Task: Assessment of the current, unsustainable, and future capabilities of the DoD Organic IB.
- Mission Process
 - Developed specialized survey
 - Eight facilities surveyed in 2010
 - CBRN Items produced/stored/repaired for the services
 - Facility overview and dimensions
 - Personnel workload, skill sets, and longevity
 - Private/Public Partnerships
 - Received 100% survey response

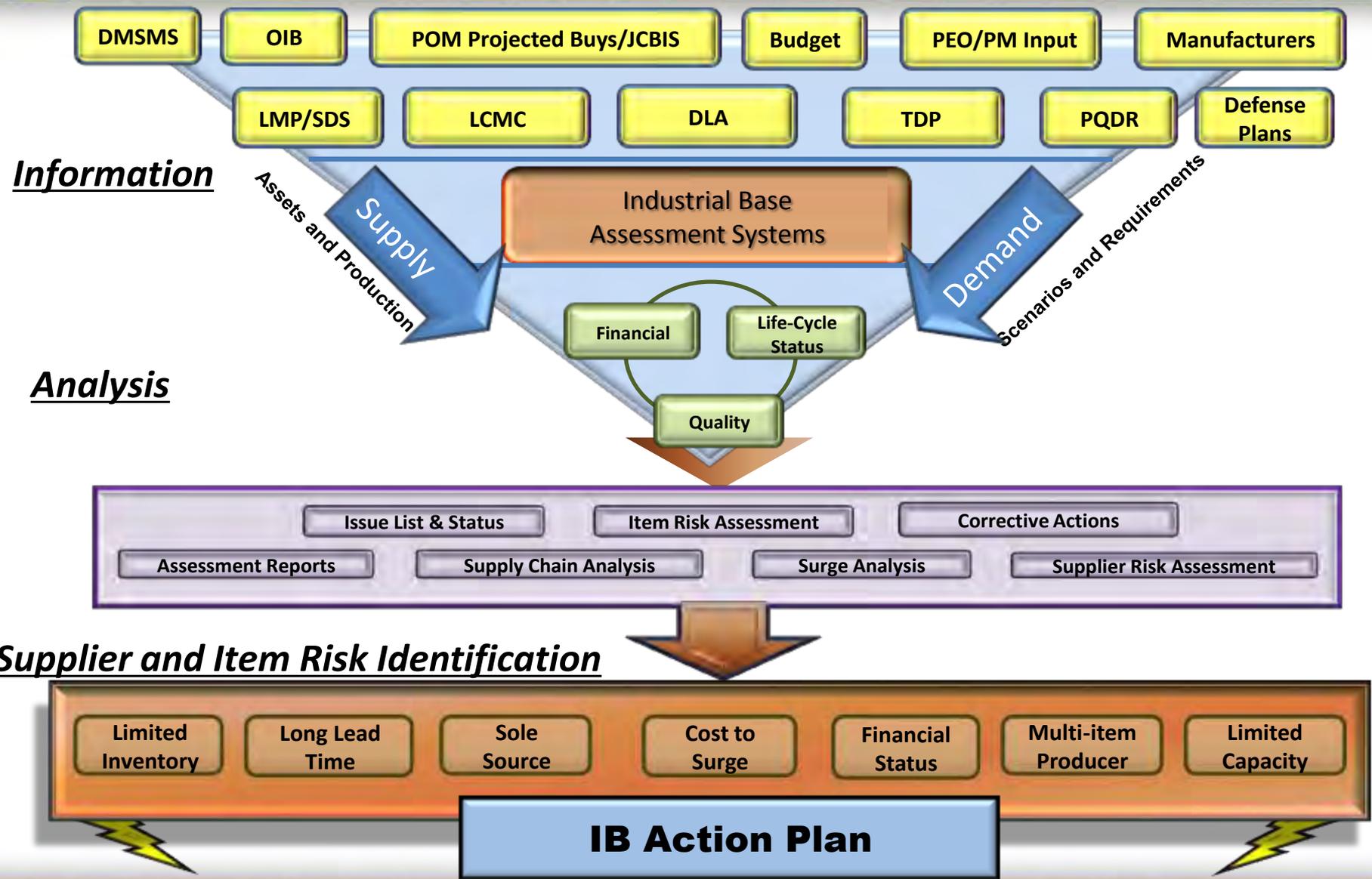


DoD is looking for opportunities to expand Public/Private Partnerships (PPP)



Predictive Analysis Process

Inputs and Outputs





Predictive Process



Framework for analysis

- Combines multiple informational sources to drive an IB analysis
- Compartmentalizing analysis into 3 time horizons: near, mid, and far term
- Process includes:
 - Incorporating the CBRN 30yr plan framework
 - Identifying equipment service life and transition points
 - Determining/incorporating economic analysis and O&M forecasting
 - Conducting a “What-If” analysis that will include multiple scenarios based on timeline (i.e. budget increase/reduction, surge, technology insertion, etc.)
 - Conducting IB analysis driven by the framework and gaps

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SUSTAINABILITY





Questions

Industrial Capability Assessments

Predictive Analysis

Manufacturer Analysis

CBRN Annual IB Report

Industrial Base Working Group

DMSMS Analysis

Supply Chain Analysis



IBAS



Acquisition Research

Annual Report To Congress



Collaboration

Organic IB Assessments

CBRN Item Assessments

**Defense Production Act
Title III Assessments**

Market Research



Backup Slides



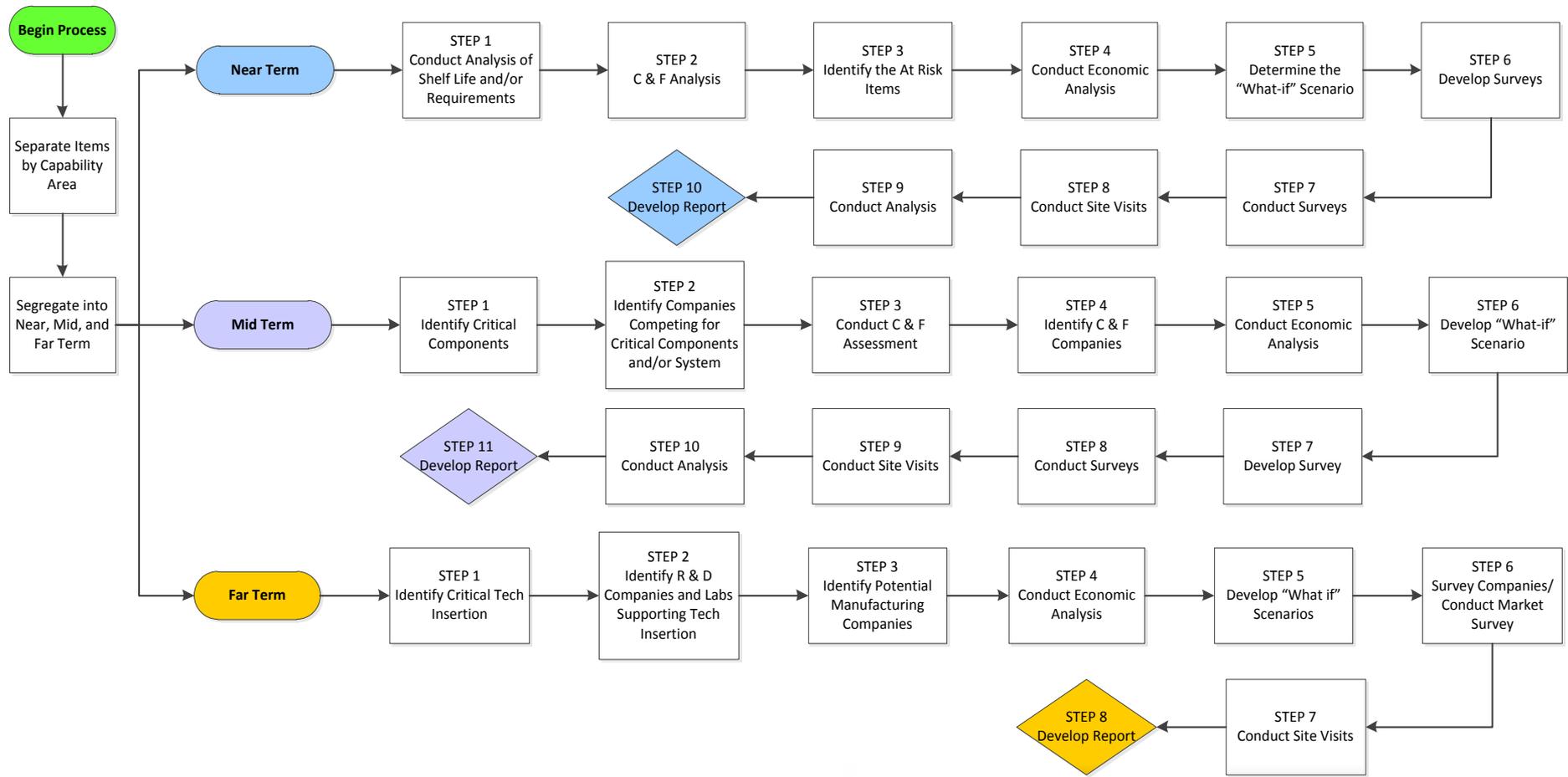
Fragility and Criticality Criteria

Product/Service Criticality Ratings - v5: Rev Date 01NOV2013						
Rating	a	b	c	d	e	
Capability = technology, part, service, hardware, software. Criticality = Characteristics that make a specific product or service difficult to replace if disrupted.						Discussion
Defense Unique	Q: To what degree is the market for this capability commercial?					Some common barriers to new entry in a market are high technical requirements, lack of access to intellectual property, upfront investments in specialized equipment or facilities
	80% or more commercial market	30-60% commercial. Low barriers to enter market	30-60% commercial. Significant and costly barriers to entry	20% or less commercial. Relatively low barriers to entry	20% or less commercial. Significant and costly barriers to enter market	
Skilled labor requirement	Q: To what degree are specialized skills needed and available to integrate, manufacture or maintain this capability?					This is from the "production" perspective. Consider the degree to which specialized skills are needed, AND whether the workforce is available to meet needs.
	Minimal special skills. Expertise commonly available or easily obtained.	Specialized skills, but processes well documented. No workforce issues.	Highly specialized skills, no workforce issues near term.	Highly specialized skills, potential workforce issues near term (e.g. limited specialists available)	Highly specialized skills and workforce issues anticipated (e.g. Limited specialists; diminishing workforce)	
Defense design requirements	Q: To what degree is defense-specific knowledge required to reproduce this capability, an alternative, or the next generation design?					This is from the "design" perspective. Capabilities that require OEM proprietary knowledge are an example of highly specialized since these capabilities are difficult to outsource. Consider also whether the workforce is available to meet needs.
	Designs are commercially available. Minimal defense-related knowledge required.	Designs are commercially available, but some defense-specific (non-commercial) knowledge required.	Specialized and defense-specific, no workforce issues near term	Specialized and defense specific, potential workforce issues near term (e.g., limited availability)	Highly specialized and limited workforce (e.g., unique defense parameters, security clearance, proprietary practices)	
Facility & Equipment requirements	Q: Are specialized equipment or facilities needed to integrate, manufacture, or maintain this capability?					Consider facility and equipment requirements, size and uniqueness
	Minimal. Equipment/facilities are common	Limited. Alternative sources can produce similar products.	Moderate. (e.g., qualification of production line; specialized skills or technology)	Specialized	Highly specialized equipment/facilities are required	
Reconstitution Time	Q: What is the impact on the DoD in time to restore this capability if it is lost?					Impact on DoD due to time required to restore capability, e.g., due to extended production shutdown
	Minimal time impact to restore	Limited time impact to restore	Moderate time impact to restore	Significant time impact to restore	Severe time impact to restore.	
Availability of Alternatives	Q: To what degree are cost, time, and performance-effective alternatives available to meet DoD needs?					
	"Drop-ins" exist and are currently used in other programs	Alternatives exist. Low/limited impact to substitute	Moderate impact to incorporate substitute alternatives	Significant impact to use substitute alternatives	Severe impact: Limited or no reasonable alternatives or workarounds exist	
Rating	a	b	c	d	e	

Ratings:	
e	Very Strong direct impact/dependence/relationship/issue
d	Strong impact/dependence/relationship/issue
c	Moderate Impact – Present risk with the ability to degrade, but not an issue
b	Limited impact
a	Minimal impact



What-if Process – Summary





Predictive Process

Results/Findings and Action Plans

- Results/Findings:
 - Identify gaps and risks (near, mid, and far)
 - Identify critical capabilities/technologies
 - Identify critical/fragile CBRN sectors
- Action Plans
 - Inform leadership and influence the POM
 - Identify PPP opportunities
 - Develop procurement practices that stabilize the IB and maintain warfighter readiness



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SUSTAINABILITY