

UNCLASSIFIED



Joint Program Executive Office for Chemical and Biological Defense

Joint Program Executive Office for Chemical and Biological Defense

NDIA Annual CBRN Defense Conference and Exhibition

Douglas W. Bryce
Joint Program Executive Officer for
Chemical and Biological Defense

Aug. 2, 2016





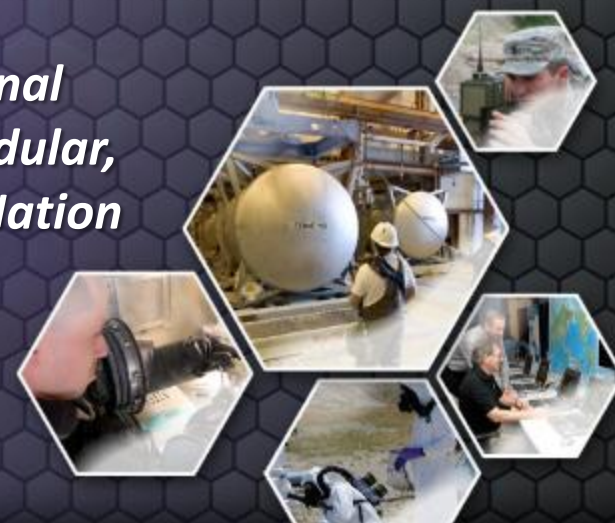
Joint Program Executive Office for Chemical and Biological Defense

Mission:

Provide Research, Development, Acquisition Fielding and Life Cycle Support of Chemical, Biological, Radiological and Nuclear Defense Equipment, Medical Countermeasures Capabilities for Army, Marine Corps, Air Force, Navy and Combatant Commands Supporting the National Strategies

Vision:

An Agile, Results-Oriented, and Transformational Acquisition Enterprise Delivering Net-Centric, Modular, Tailorable and Multi-Purpose Capabilities to the Nation





Areas of Responsibility



Areas of Responsibility

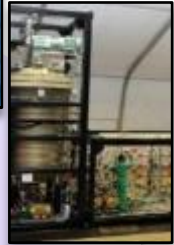
Vaccines



Treatments



Decontamination

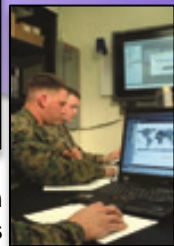


WMD Elimination

Diagnostics & Integrated Advanced Analytics



Biosurveillance



Information Systems

Chemical, Biological & Radiological Agent Detection



Individual & Collective Protection



Rad/Nuc Defense

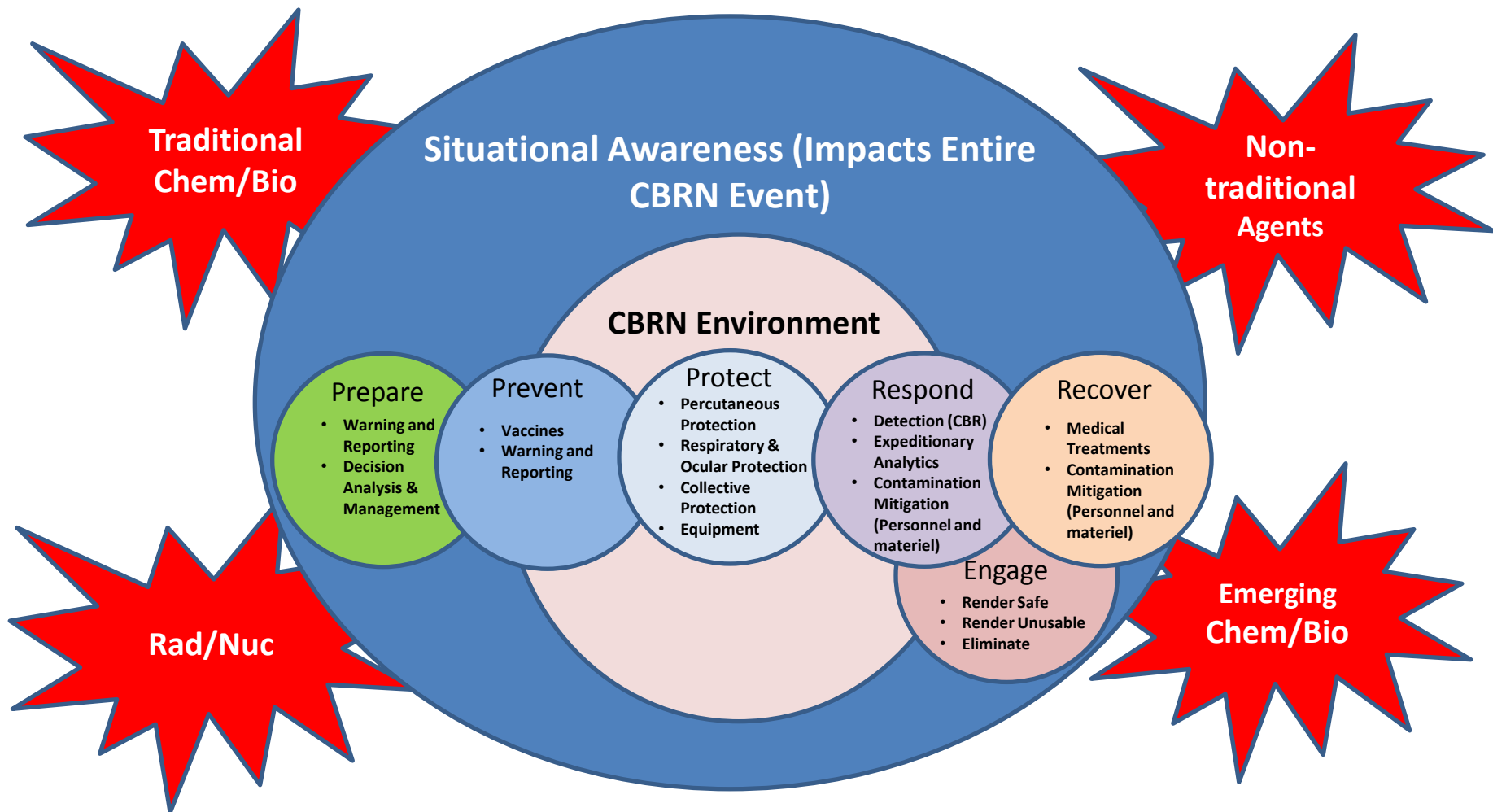


WMDs Civil Support

Total Life Cycle Management



Whole-of-Government Approach to CBRN Defense, Response & Readiness





Our Challenge

To Stay Ahead of the CBRN Threat, We Engage:

- 1. Long-term Planning and Analysis / A Unique Analytical Framework**
- 2. Key Focus Areas of Layered Defense / Individual Protection / Contracting Reform**





Long-term Planning and Analysis / A Unique Analytical Framework





Long-term Planning and Analysis

- **Visualization of Current and Future Programs/Projects**
- **Planning Tool for JPEO-CBD/Defense Threat Reduction Agency**
- **Vehicle for Industry and Government Partners to Help Us Reach our Potential**
 - **Assistance in Reaching or Exceeding the Targets**
 - **Technological Possibilities to Redefine the Targets and Endpoints to include Emerging Threats**
 - **Identify Game Changing Technology Insertions**

How Can We Give Our Warfighters The Best Capability?



Analytical Framework Mission

A robust, quantitative and repeatable framework which supports:

- **Comparison of trades** during concept development, analysis of alternatives and material solution analysis
- Characterize the **impacts** of design changes on **mission effectiveness**
- Develop end-to-end, integrated on **capability sets** not widgets
- Traceable investment strategies to drive down **operational risk**
- Early **collaboration** from all stakeholders/performers

Defendable Data Driven Investment Decisions



Bottom-Up Approach



Top-Down Approach



Analytical Framework Components

Mission Context

Strategic Mission
Mission Areas
CBRNe Operations
Operational Tasks
Tactical Tasks
Sub-Tasks
Capability Sets

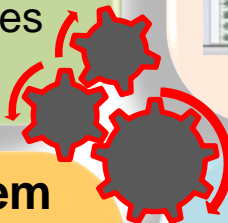
Gaps are Mapped to Tactical Task

3 10 16 4

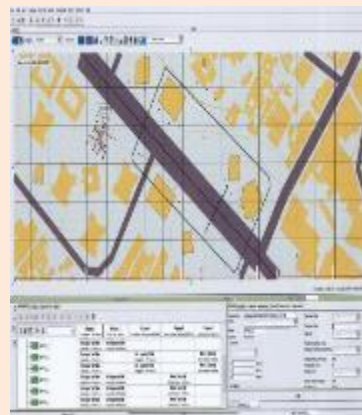
Portfolio Analytics

How do we manage the portfolio and what capabilities are we missing?

Examines gaps and trends in current threats and capabilities



Force on Force Simulation



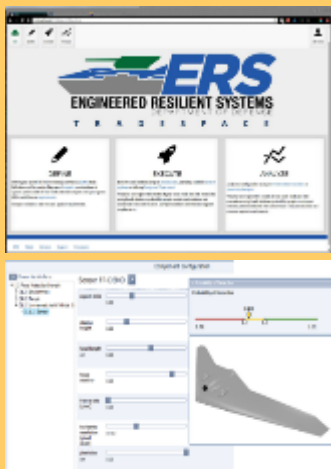
What effect do new capabilities have on mission outcomes when compared to baseline capabilities?

Provides System of System view in an operational context

System of System Engineering

What can be traded to reduce cost and operational risk?

Pairs system engineering principles with computer-based models, visualization, and discrete simulation tools



Business Analytics

Is this the optimal investment?

Provides comprehensive knowledge (cost, risk, suitability, interoperability, etc.) about the capabilities



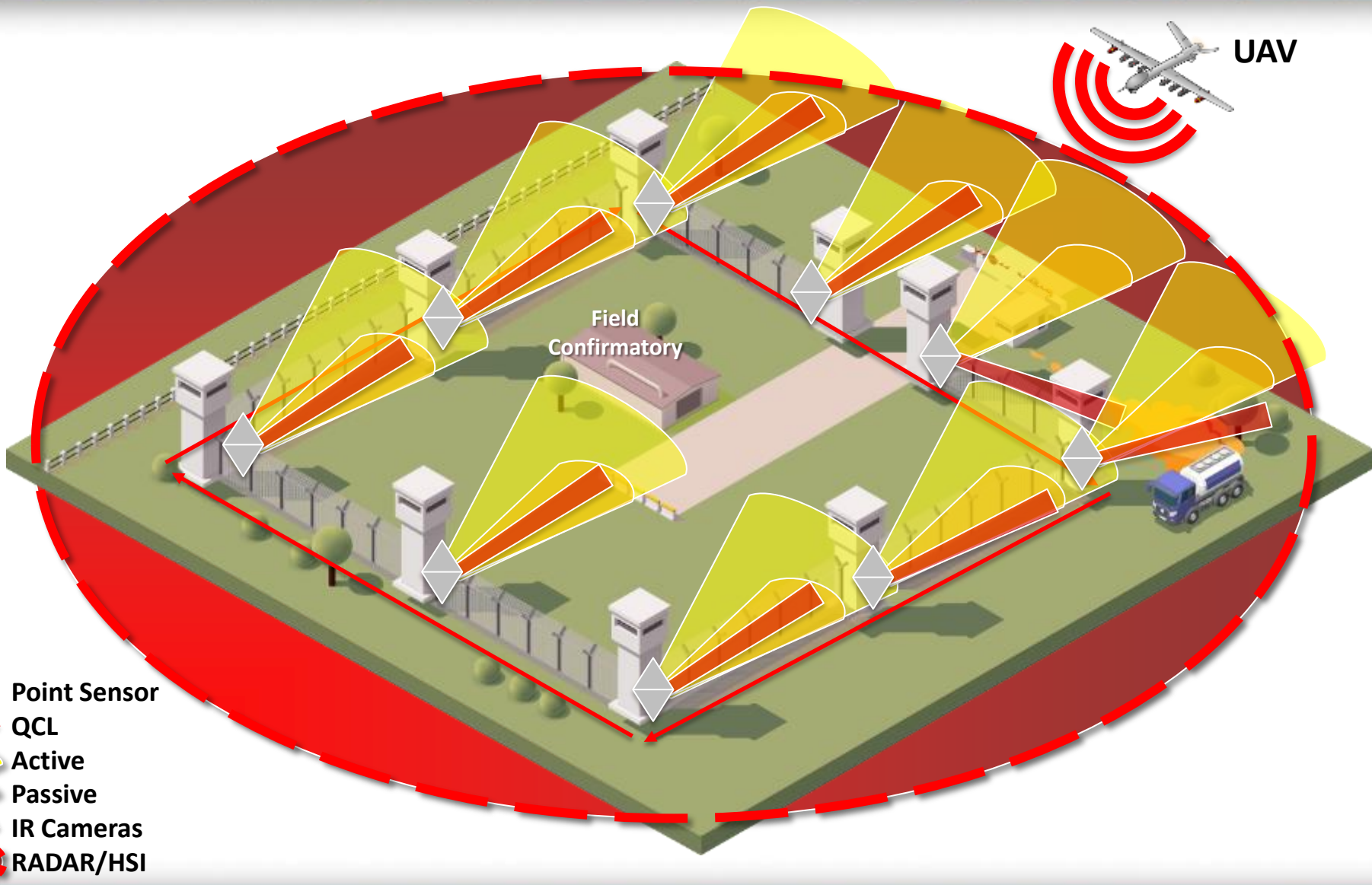


Key Focus Areas of Layered Defense / Individual Protection / Contracting Reform





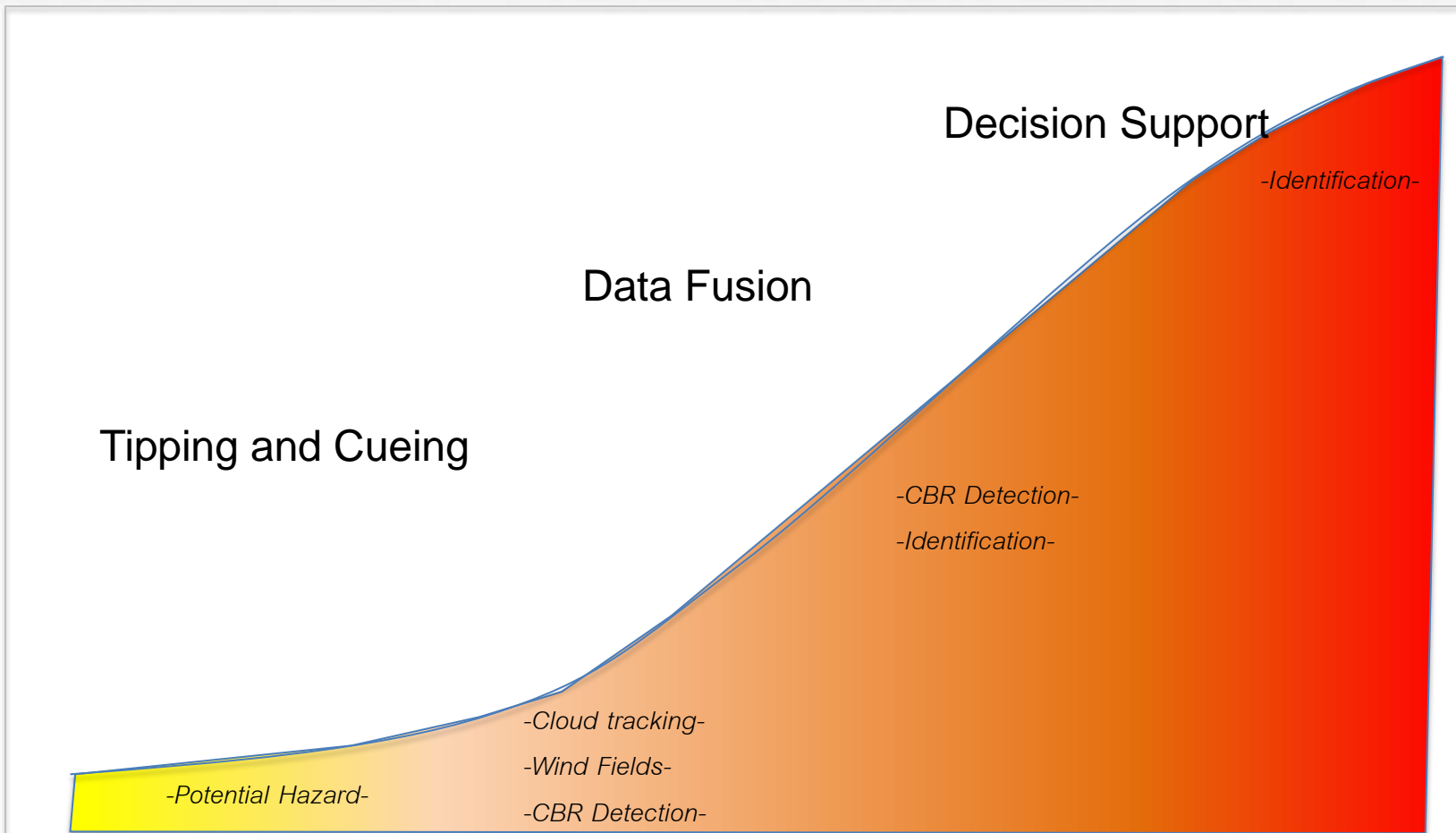
The Future of Layered Defense





The Value of Layered Defense

Confidence/Specificity



EARLY WARNING SYSTEM			Tripwire	Point Sensing	Field Confirmatory
1	2	3	4	5	6






Benefits

- **Integrated Architecture enables rapid tipping and cueing of non-CB and CB sensors**
- **Data Fusion and Decision Support Provides:**
 - Enhanced timely SA for the decision makes
 - Higher Confidence through integrated data
- **Capability Sets allow**
 - Reduced complexity and cost for each single node
 - Tradeoff across system components
 - Dynamic system to respond to broader evolving threats
 - Cost Efficient/Rapid Technology Refresh



Individual Protection: Uniform Integrated Protection Ensemble Increment (UIPE) 2

Mission Areas	Profiles	Challenge/Threat	Concept(s)/Options	Partners
 <p>LAND</p>	Infantry/ Fires/Combat Vehicles	Potential <i>High</i> Exposure (up to 10 grams of agent per square meter)	<ol style="list-style-type: none"> Complete integration into the Individual Soldier Kit Layered ensemble that integrates with the Individual Combat Kit Overgarment 	PEO Soldier/ USMC Infantry Weapons
 <p>AIR</p>	Pilot/Air Crew	Likely <i>Low</i> Exposure (from 1 to 2 grams of agent per square meter)	<ol style="list-style-type: none"> Undergarment (Aviation Integrated Ensemble) Protective Flight Suit 	USAF/NavAir
 <p>SEA</p>	Shipboard/ Coastal	Likely <i>Medium</i> Exposure (up to 5 grams of agent per square meter)	<ol style="list-style-type: none"> Overgarment 	NAVSEA
High Threat Contingency/ Humanitarian/ Homeland Defense	Natural Disasters/ Homeland Defense	Rad/Highly Contagious Disease/High Chemical Threat (Up to 20 grams of agent per square meter)	NFPA 1994 Class 1 and NFPA 1994 Class 3	NORTHCOM/ DHS/HHS



OCO: Facilitating Contract Solutions





OCO Contracts Overview

OPETS

*\$495M IDIQ Services Contract
Program Management & SETA Support Services
Across the Enterprise (HQ & JPMs)
~400 FTEs to date*

JE-OPETS

*Follow-On to OPETS
4-Year Base Period & Two 3-year Option Periods
(FY19 to FY29)*

Contracted Resources

Personnel

JE-RDAP

*\$6.27B IDIQ R&D Supply Contract
Research, Development, Acquisition, and Procurement
Main Contract Vehicle for ALL FUTURE
JPM-Developed CBRNE Defense Systems, Equipment & Material*

Research, Development, Acquisition
& Production/Procurement

JE-CLaSS

*\$900M IDIQ Services Contract
Provides contracted PBL support to
JPEO-CBD fielded CBRNE Defense Systems*

Life Cycle Logistics/PBL Support

Awarded/Award in Process

Future Award

OBJECTIVE: to build, execute, and manage a portfolio of Joint Enterprise Omnibus contract vehicles to support all contracted requirements across the JPEO-CBD



Other Transaction Authority (OTA) Award for CBRN Defense MCM Development

- **Authority: 10 U.S.C. § 815**
 - Fiscal Year 2016 National Defense Authorization Act Revisions
 - Repealed § 845 & Replaced with § 815
 - Revised dollar approval thresholds (\$50M/\$250M)
 - Clarified non-traditional defense contractor (“NTDC”) and small-business participation
 - Clarified the transition from prototype development to production
- **April 8, 2016: ACC-NJ awarded OTA**
 - 3 Objective Areas: Prevention, Detection, Treatment
- **Awardee: Medical CBRN Defense Consortium (MCDC) (ATI: Consortium Management Firm)**

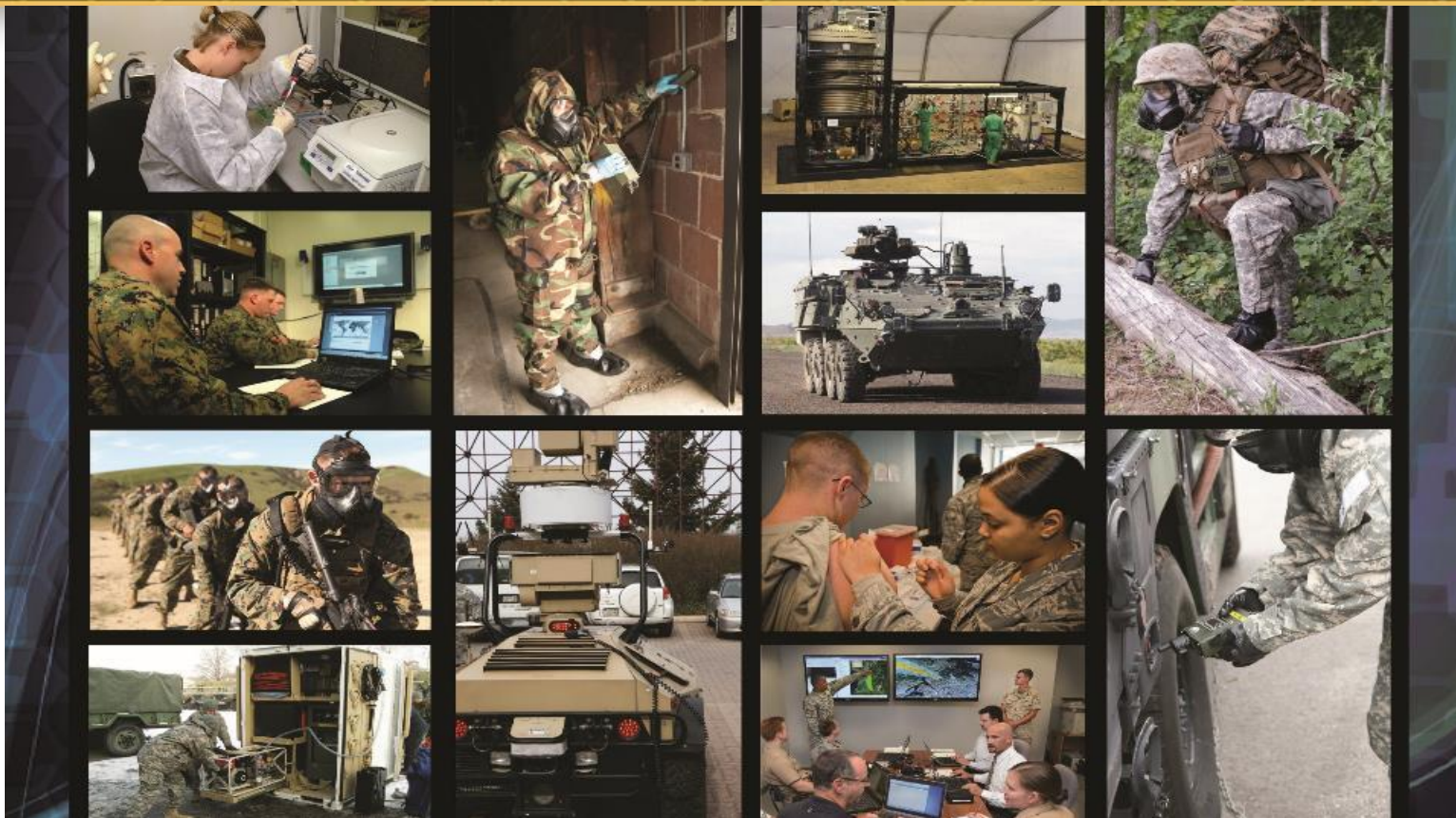


OTA Expectations

- **Access to Industry Expertise**
 - Extremely competent professionals
 - Regulatory experience and success
- **Reduce/manage risk**
 - Assess developmental programs to determine the path forward
- **Streamline development**
 - Shrink the intervals
- **Foster partnership between DoD, consortium & industry**
 - Coordinate planning, and research and development
- **Partner with Other Government Agencies**



Closing Remarks



SPECIAL THANKS TO:

- **NDIA and Our Industry Partners**
- **Our DoD Partners**
- **COL Nate Farmer and the CDTF Staff**

***The BEST Technology and Equipment
At the RIGHT PLACE
At the RIGHT TIME
At the RIGHT COST***



Douglas W. Bryce

**Joint Program Executive Officer
for Chemical and Biological Defense**

410-436-4141

douglas.w.bryce.civ@mail.mil

www.jpeocbd.osd.mil