



# Joint CBRND Requirements



**2015 NDIA CBRN Defense Conference & Exhibition**

**COL A. Scott Estes  
Deputy Director, JRO-CBRND  
21 July 2015**

- **Mission / Functions**
- **Non-Materiel Efforts**
- **Requirements Development Trends**
- **Development Opportunities**
- **Questions & Discussion**

## *JRO Functions & Mission*

- **Lead joint CBRN defense equipment (CDE) and medical CDE capabilities development**
- **Develop and maintain the CBRN defense Overarching Operational Concept**
- **Represent the Services and Combatant Commanders in JCIDS and act as their proponent for coordinating and integrating CBRND operational capabilities**
- **Lead development of DOD CBD POM**
- **Develop the CBRND Modernization Plan**
- **Conduct CBRN Operational Risk Assessment**
- **Facilitate development of joint CBRN defense doctrine, training, senior leader education, and sponsor development of multi-service doctrine**
- **Oversee, manage, and sponsor concept experimentation**

***CJCS focal point for CBRN defense concepts, requirements, and chem-bio defense programming to advance Joint Force capability to counter WMD.***

## *Non-Materiel Efforts*



- **Bio-Surveillance Architecture submittal – 31 JUL**
- **Joint Concept Development**
  - **Prevent the Use or Transfer of WMD – 31 JUL OPSDEPS**
  - **Operations in CBRN Environments – Prospectus submit Aug 15**
- **Bio and NTA CONOPS Revision**
- **Quick Look Studies:**
  - **Completed: Toxins; Encapsulation; NTA 3A & 3B; Anti-materiel Agents**
  - **In progress: Emerging Infectious Diseases; Synergistic Agents; Enhanced Viruses; Enhanced Bacteria**
- **Chemical Challenge Level Study – 1st chapter due in Aug**
- **Risk Assessments**
  - **CASSANDRA Homeland: 26-27 AUG**

# Requirements Development Trends

- Increasing focus on:
  - System survivability to include cyber  
*"the system must be able to survive and operate in a cyber-contested environment"*
  - Life cycle costs
  - Power sources / requirements
  - Upgradability
- Reduce vaccine program risk through specificity
  - Encephalitis
  - Filovirus
- Cost - Performance "trade space" identification
- Evolving thinking on Capability Development and Risk Mitigation
  - Capability Sets
  - Early Warning ≠ Standoff Detection
    - "Health Map" example



# *Development Opportunities*

- **Aircraft Contamination Survivability**
  - Decontamination
  - Patient/Remains Transportation
- **Uniform Integrated Protective Ensemble**
- **Mass Casualty Decon**
- **Coatings**
- **Wearable sensors**
- **Almost anything addressing NTA threats**



# Questions & Discussion



# *Matériel Efforts: CBRND Core Capabilities Areas*

## **SENSE**

- Chemical Detection
- Biological Detection
- Radiological Detection
- Expeditionary Analytics
- Medical Diagnostics

## **SHAPE**

- CBRN Warning and Reporting
- Decision Analysis & Management

## **SHIELD**

- Respiratory and Ocular Protection
- Percutaneous Protection
- Chemical Prophylaxis
- Biological Prophylaxis
- Radiological Prophylaxis
- Expeditionary Collective Protection

## **SUSTAIN**

- Personnel Contamination Mitigation
- Materiel Contamination Mitigation
- Chemical Therapeutics
- Biological Therapeutics
- Radiological Therapeutics



# *Materiel Efforts*

## SENSE

- Dismounted Recon Sets, Kits, & Outfits
- Common Analytical Laboratory Sys
- Joint Biological Tactical Detection Sys
- Next Generation Diagnostic System

## SHAPE

- Joint Warning and Reporting System
- Joint Effects Model

## SHIELD

- Botulism
- Plague
- Filovirus
- Western Eastern Venezuelan Equine Encephalitis

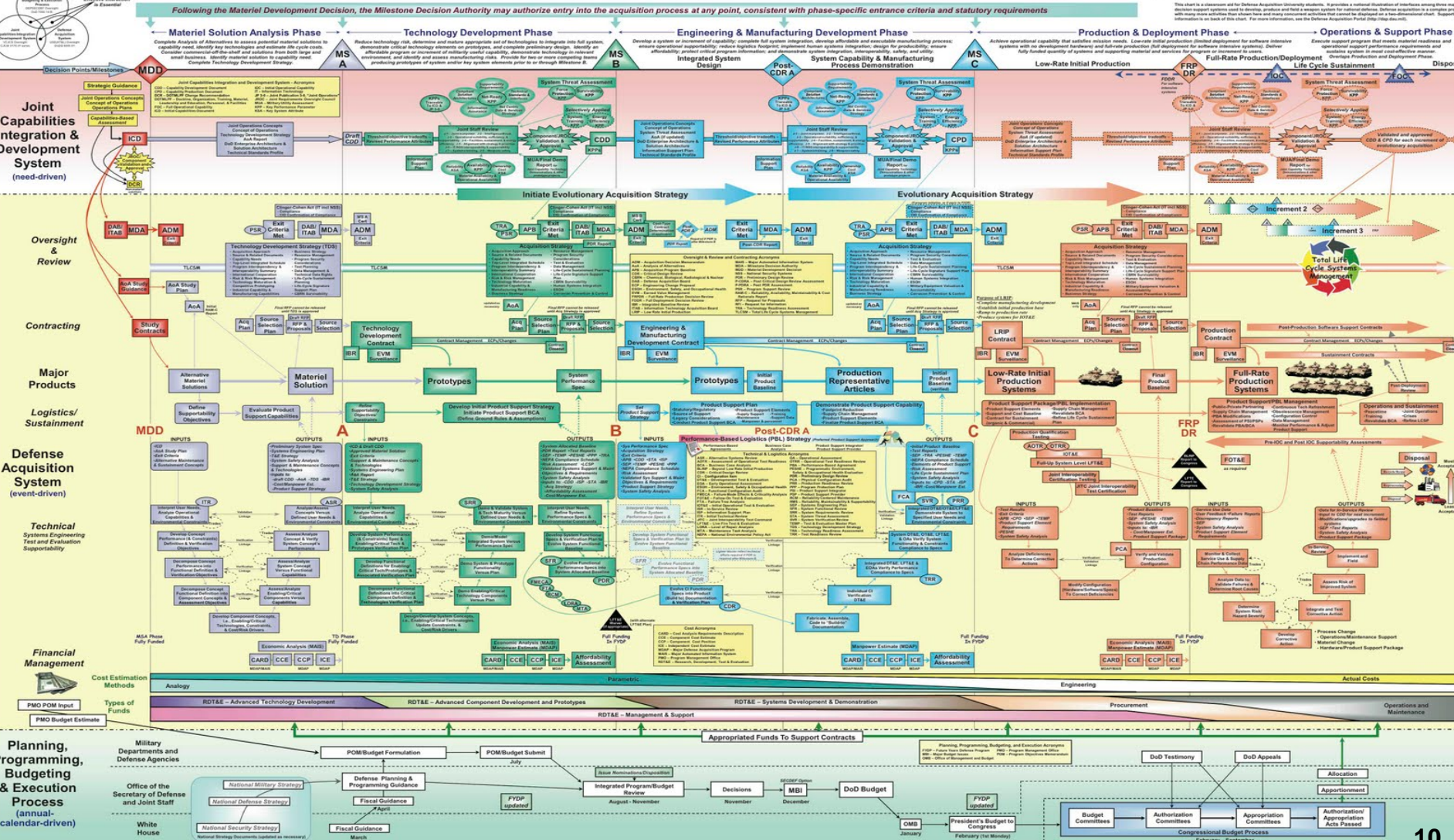
## SUSTAIN

- Contaminated Human Remains Pouch
- Joint Biological Agent Decon System
- Joint General Purpose Decontaminant
- Joint Service Equipment Wipes
- Emerging Infectious Diseases – TX
- Filovirus

# Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System



Version 5.4 15 June 2010



Authors Chuck Colwell and Brad Brown

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