

Joint Capabilities to Combat Weapons of Mass Destruction

**DoD Chemical and Biological Defense
Advance Planning Briefing for Industry
4 April 2007**



Presented by:

Colonel Patrick J. Sharon, USA

Deputy Director, Joint Requirements Office for CBRN Defense

Directorate for Force Structure, Resources and Assessment (J-8), The Joint Staff

- Strategic Environment
- Policy / Guidance
- CBRN Defense Organization
- JCIDS Process

Strategic Environment – Changing Landscape

Today, the United States faces a greater danger from an **expanding number of hostile regimes and terrorist groups** that seek to acquire and use WMD. These actors may not respond to traditional tools and concepts of deterrence.

- Hostile states seeking means of regional hegemony and intimidation; willing to transfer technology and know-how to others
- WMD-armed states losing control
- Rapid spread of technology and knowledge

It is **extremely difficult to collect reliable intelligence** on WMD programs and activities, which are closely guarded secrets. The prevalence of dual-use technologies and legitimate civilian applications means nuclear, chemical and biological research efforts are **easy to conceal and difficult to detect and monitor**. Based on the **demonstrated ease** with which uncooperative states and non-state actors can **conceal WMD programs** and related activities, *the United States, its allies and partners must expect further intelligence gaps and surprises.*

National Response – Policy and Guidance



NATIONAL STRATEGY TO
COMBAT WEAPONS
OF MASS
DESTRUCTION

National Strategy to Combat Weapons of Mass

Destruction articulates a strategy built upon the three pillars of nonproliferation, counterproliferation, and consequence management.



THE NATIONAL
SECURITY STRATEGY
OF THE
UNITED STATES
OF AMERICA

National Security Strategy (NSS) - “Prevent our enemies from threatening us, our allies, and our friends with weapons of mass destruction.”

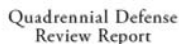


National Military Strategy to
Combat Weapons of Mass Destruction



13 February 2006
Chairman of the Joint Chiefs of Staff
Washington, DC 20318

National Military Strategy to Combat WMD (NMS-CWMD) amplifies the strategy in the NSS and provides a framework for combating WMD to DOD Components.



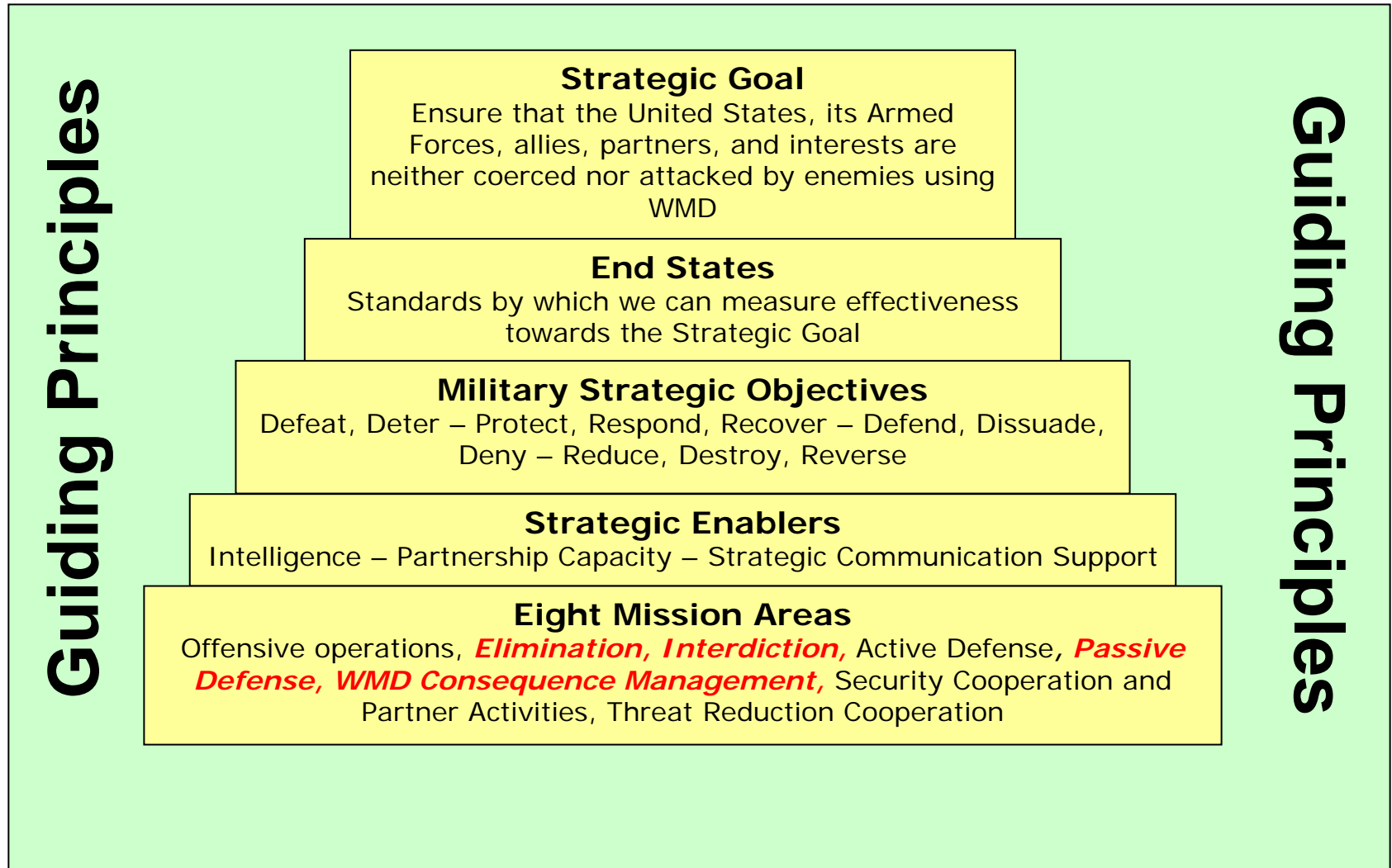
Quadrennial Defense
Review Report



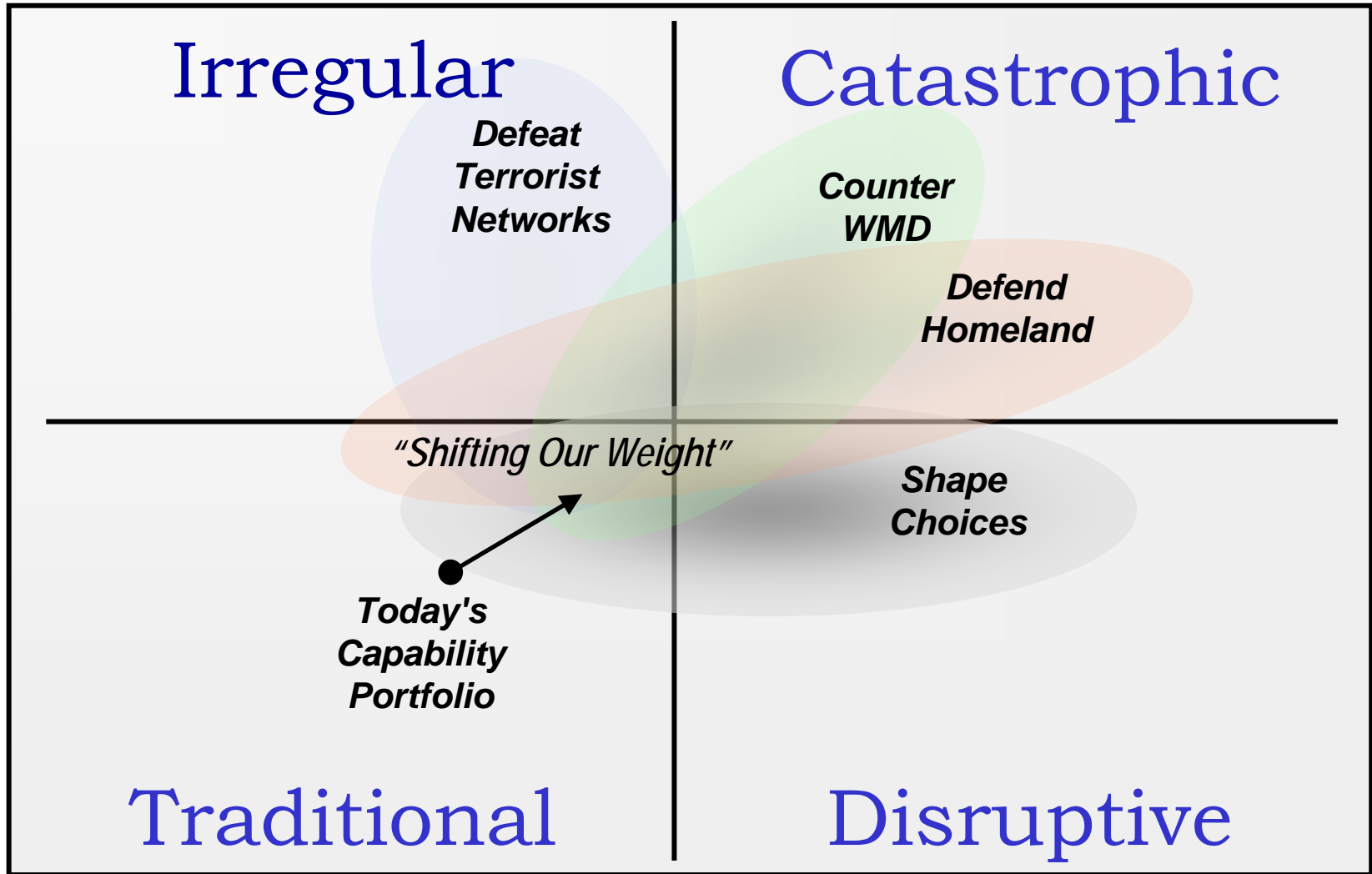
February 6, 2006

2006 Quadrennial Defense Review Report identifies four priorities: Defeat Terrorist Networks, Defend the Homeland, Shape Choices of Countries at Strategic Crossroads, and Prevent Acquisition or Use of WMD.

National Military Strategy - CWMD Architecture



QDR Objective – Shift in Focus



Continuing the reorientation of military capabilities and implementing enterprise-wide reforms to ensure structures and process support the President and the warfighter

DoD Responses – Implementing QDR

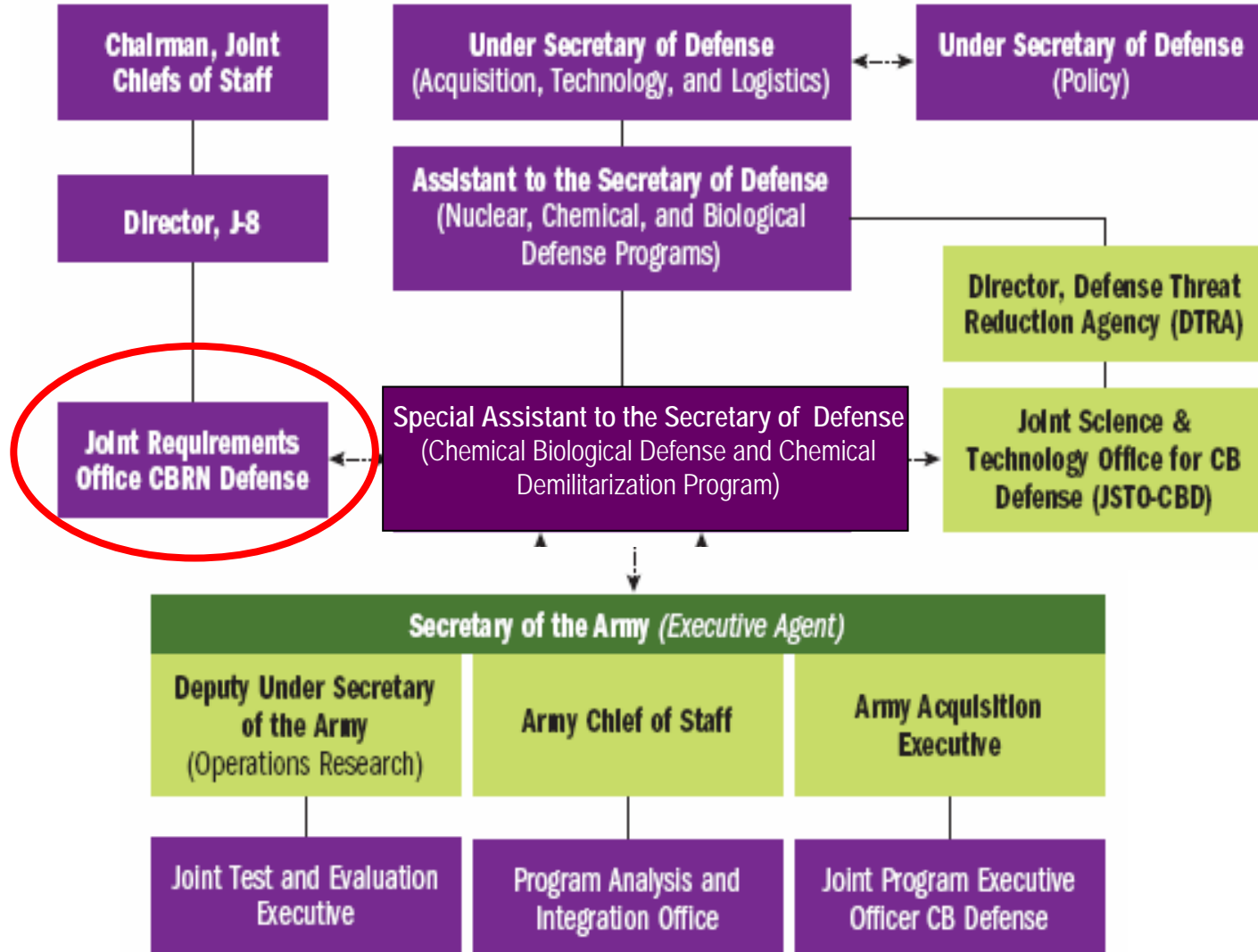
- Commander USSTRATCOM as lead Combatant Commander for combating WMD
- Defense Threat Reduction Agency as primary Combat Support Agency – STRATCOM Center to Combat WMD
- Designate US Army 20th Support Command as Joint Task Force WMD Elimination
- Expand render safe capability & capacity
- Develop ability to locate, tag & track WMD shipments
- **\$1.5B investment in advanced medical countermeasures**

DoD Responses – Beyond QDR

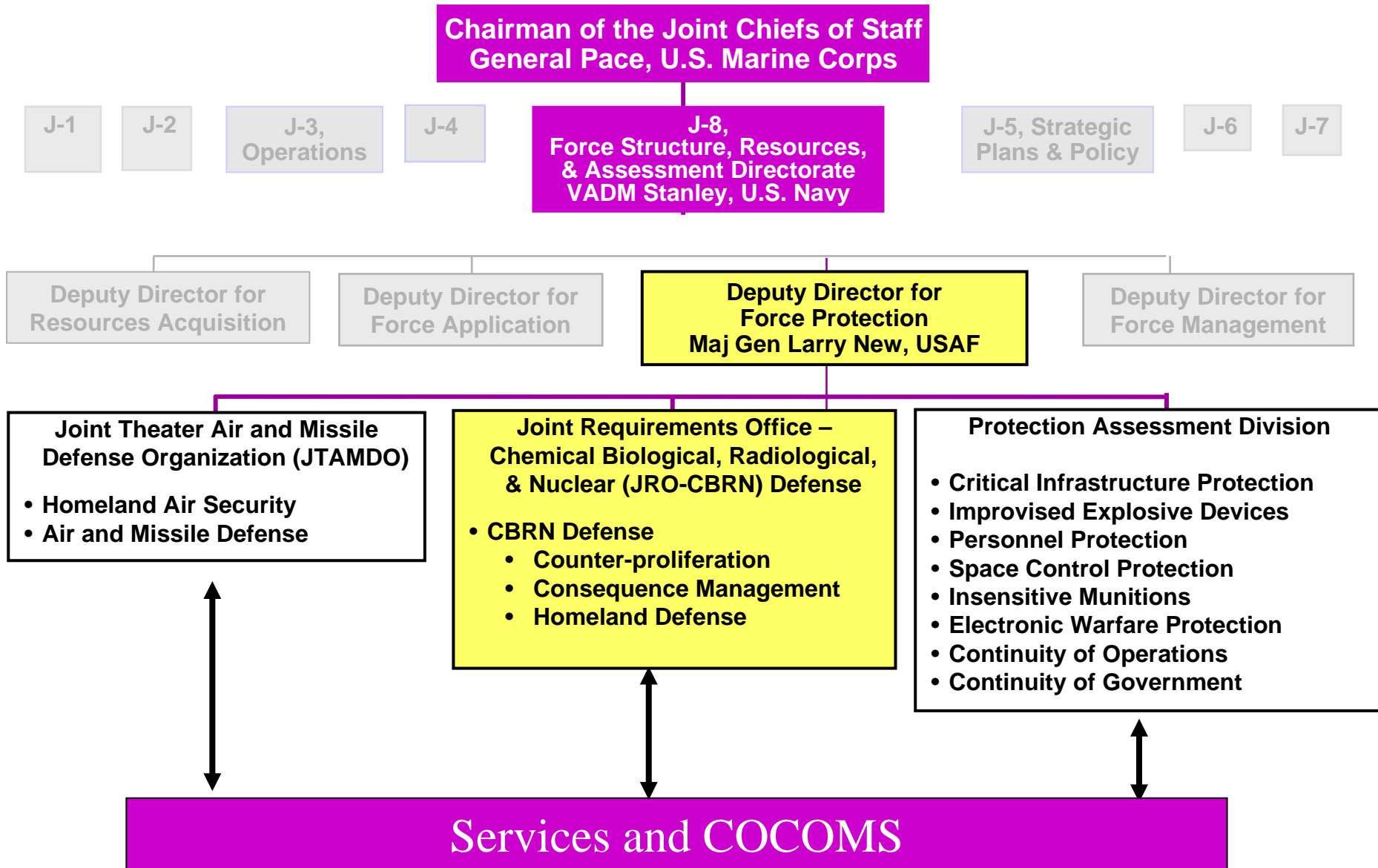
- **CB Defenses - ~350% increase in investments since 1996**
- Consequence Management – 55 WMD Civil Support Teams
- Defense Nuclear Detection Office – supporting Department of Homeland Security
- NATO Multinational CBRN Defense Battalion – 2002 U.S. initiative; now 17+ Allies contribute
- Maritime Interdiction exercises – in support of National agenda



CBDP Management Structure



Joint Staff and J8 DDFP Organization



JRO – CBRN Defense Charter

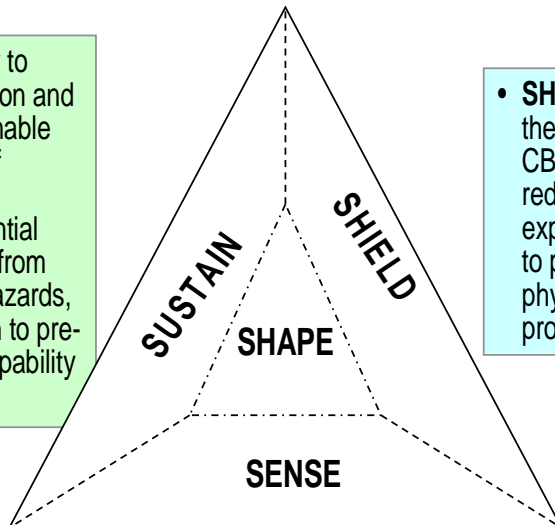
- Single office within DOD responsible for the planning, coordination, and oversight of **joint CBRN defense operational requirements**
 - Develop and maintain the CBRN defense overarching operational concept and the CBRN Defense Modernization Plan
 - Represent the Services and Combatant Commanders in the requirements generation process and act as their proponent for coordinating and integrating CBRN defense operational capabilities
 - Develop DOD CBD POM with acquisition community support
 - Facilitate the development of joint doctrine and training and sponsor the development of multi-service doctrine
- Serve as the CJCS' single source of **expertise** to address all issues involving CBRN defense within **passive defense, consequence management, force protection, and homeland security**

Joint CBRN Defense Operational Capabilities

Joint CBRN Defense Concept

- **SHAPE** – Provides the ability to characterize the CBRN hazard to the force commander - develop a clear understanding of the current and predicted CBRN situation; collect and assimilate info from sensors, intelligence, medical, etc., in near real time to inform personnel, provide actual and potential impacts of CBRN hazards; envision critical SENSE, SHIELD and SUSTAIN end states (preparation for operations); visualize the sequence of events that moves the force from its current state to those end states.

- **SUSTAIN** – The ability to conduct decontamination and medical actions that enable the quick restoration of combat power, maintain/recover essential functions that are free from the effects of CBRN hazards, and facilitate the return to pre-incident operational capability as soon as possible.



- **SHIELD** – The capability to shield the force from harm caused by CBRN hazards by preventing or reducing individual and collective exposures, applying prophylaxis to prevent or mitigate negative physiological effects, and protecting critical equipment

- **SENSE** – The capability to continually provide the information about the CBRN situation at a time and place by detecting, identifying, and quantifying CBRN hazards in air, water, on land, on personnel, equipment or facilities. This capability includes detecting, identifying, and quantifying those CBRN hazards in all physical states (solid, liquid, gas).

SENSE

- Point Detection
- Stand-off Detection
- Reconnaissance
- Medical Diagnostics

SHAPE

- Integrated Early Warning
- Battle-space Management
- Battle-space Analysis

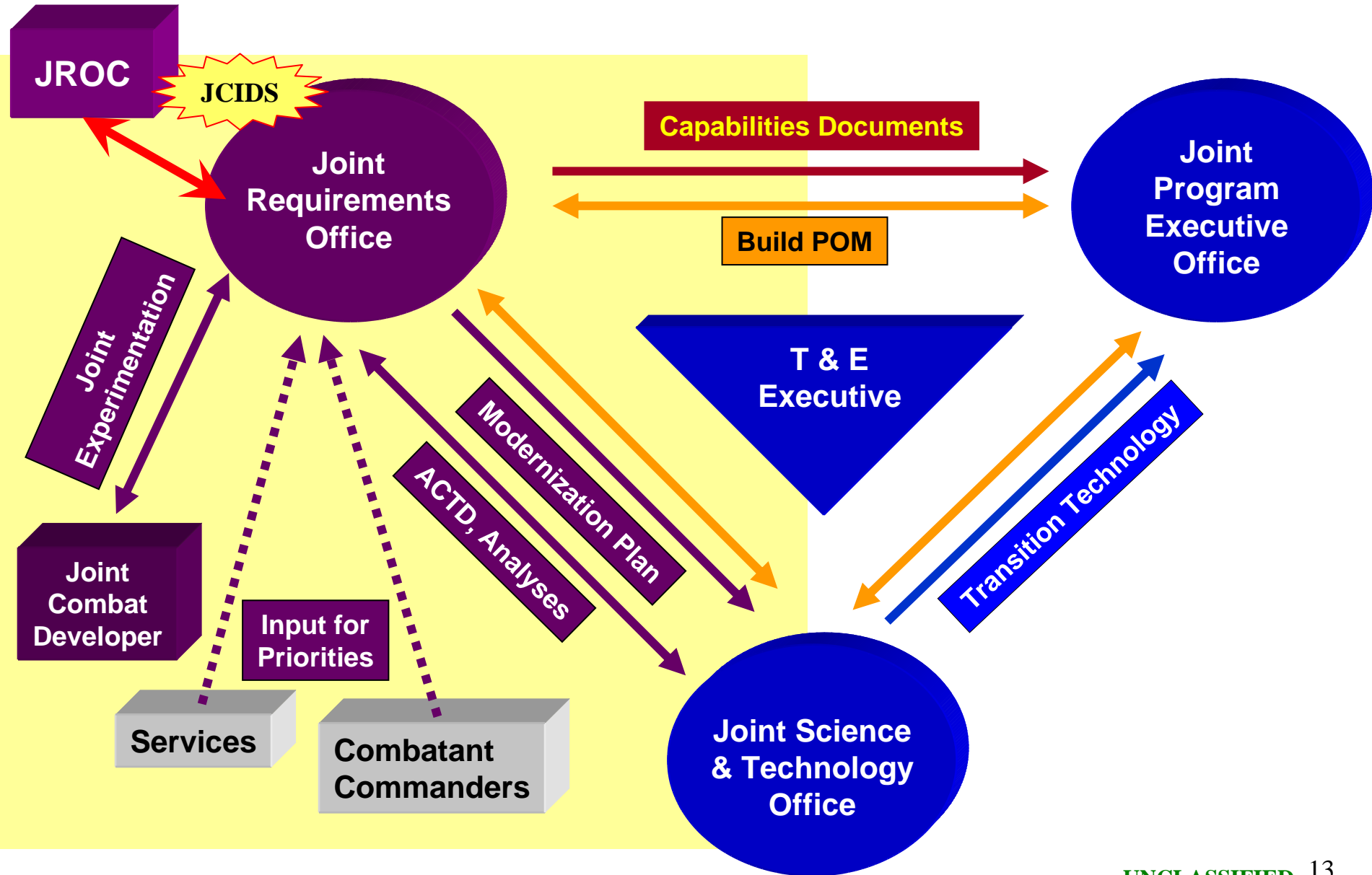
SHIELD

- Respiratory and Ocular Protection
- Percutaneous Protection
- Expeditionary Collective Protection
- Medical Prophylaxes

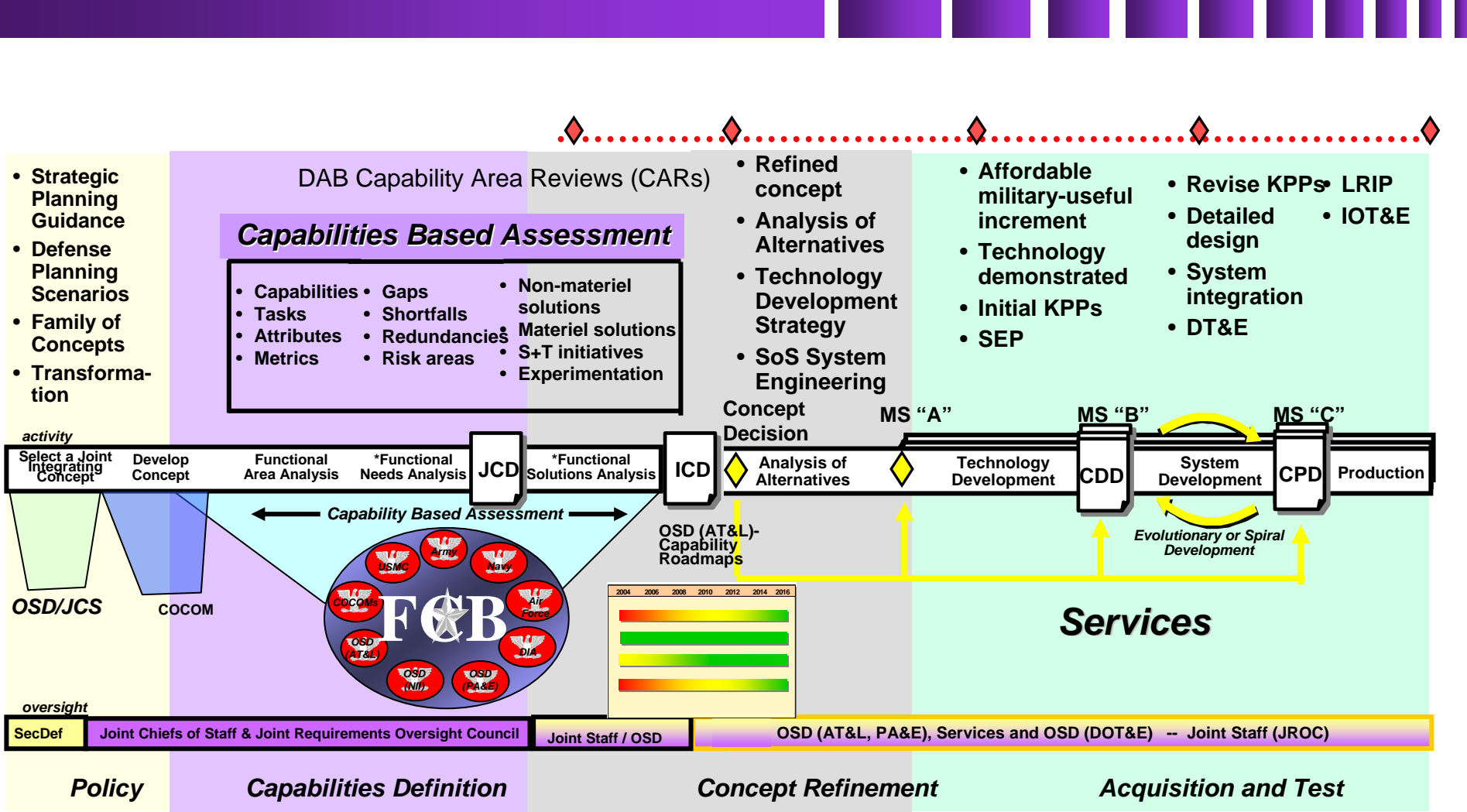
SUSTAIN

- Individual Decontamination
- Equipment Decontamination
- Fixed Site Decontamination
- Medical Therapeutics

Required Capabilities, S&T, and Acquisition



The JCIDS Process



- Strategic Planning Guidance
- Defense Planning Scenarios
- Family of Concepts
- Transformation

Capabilities Based Assessment

- Capabilities
- Tasks
- Attributes
- Metrics
- Gaps
- Shortfalls
- Redundancies
- Risk areas
- Non-materiel solutions
- Materiel solutions
- S+T initiatives
- Experimentation

- Refined concept
- Analysis of Alternatives
- Technology Development Strategy
- SoS System Engineering

- Affordable military-useful increment
- Technology demonstrated
- Initial KPPs
- SEP

- Revise KPPs
- LRIP
- Detailed design
- System integration
- DT&E
- IOT&E

activity

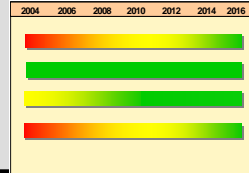
Select a Joint Integrating Concept Develop Concept Functional Area Analysis *Functional Needs Analysis JCD *Functional Solutions Analysis ICD Concept Decision MS "A" Technology Development MS "B" CDD System Development MS "C" CPD Production

← Capability Based Assessment →

OSD (AT&L)- Capability Roadmaps

Evolutionary or Spiral Development

Services



oversight

SecDef Joint Chiefs of Staff & Joint Requirements Oversight Council Joint Staff / OSD OSD (AT&L, PA&E), Services and OSD (DOT&E) -- Joint Staff (JROC)

Policy Capabilities Definition Concept Refinement Acquisition and Test

Making Warfighter Needs Reality

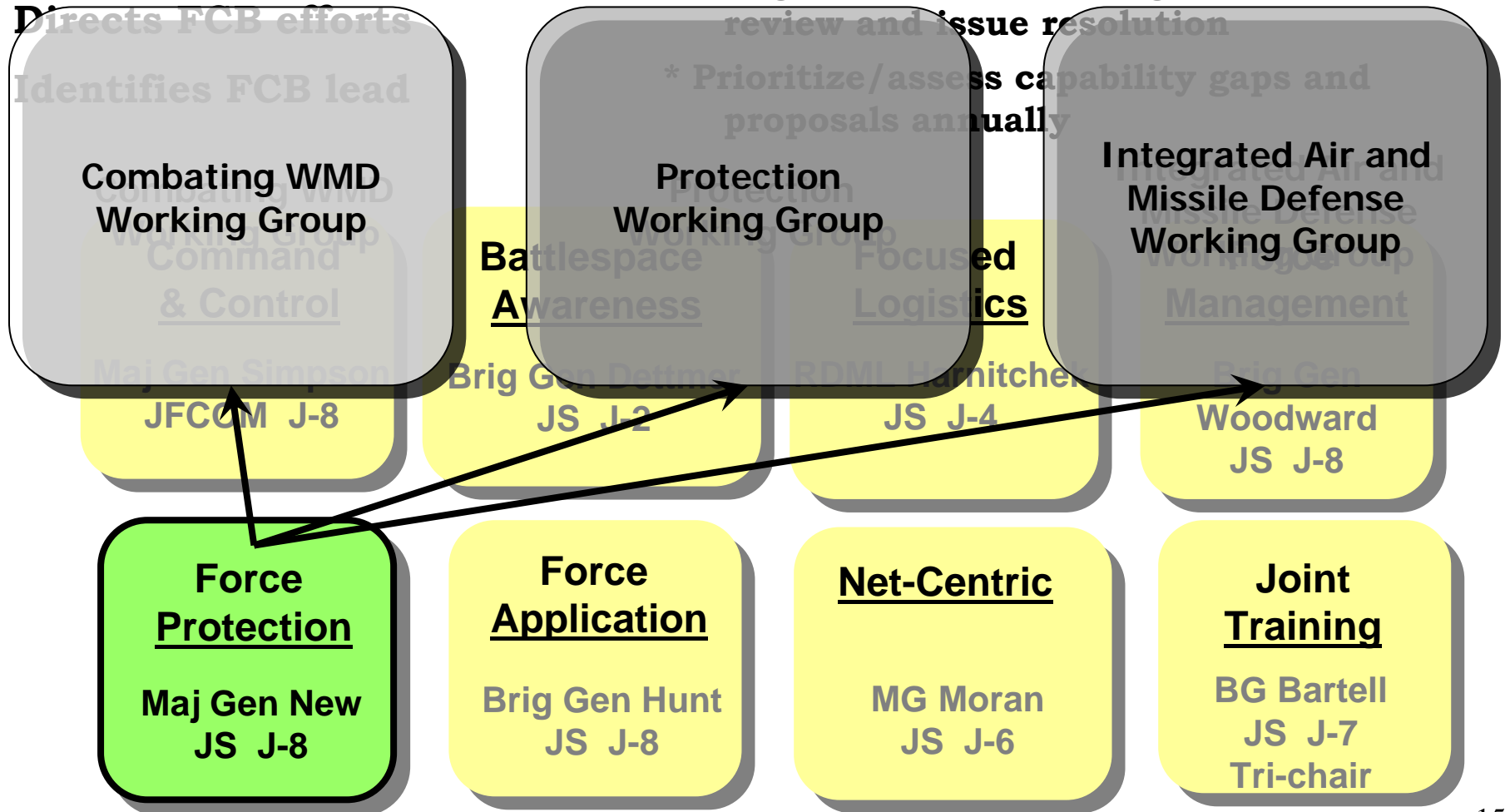
The Functional Capability Boards (FCB)

JROC:

- * Charters FCBs
- * Directs FCB efforts
- * Identifies FCB lead

FCBs:

- * OSD Co-chairs
- * Bring all stakeholders together for common review and issue resolution
- * Prioritize/assess capability gaps and proposals annually



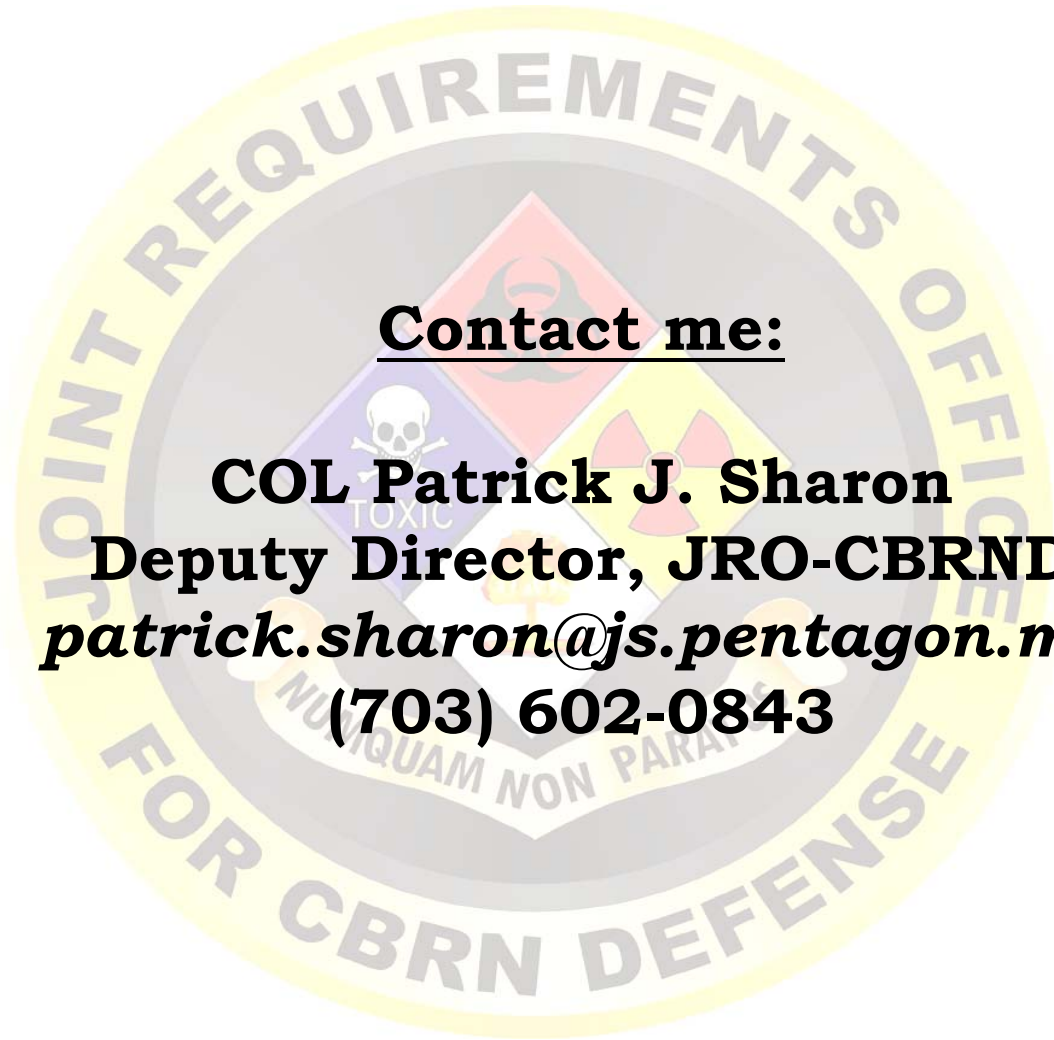
- Strategy and Planning
 - Joint Protection Functional Concept
 - Joint Strategy for Biological Warfare Defense (CJCSI 3112.01)
 - 14 CBRN documents approved in the last year
 - Joint WMD Elimination Coordinating Element (JECE) DOTMLPF Change Recommendation
 - Combating WMD Joint Integrating Concept
 - CBRN Defense Modernization Plan 2007
- Programming and Resourcing
 - CBRND Capability Joint Priority List
 - CBDDP Program Objective Memorandum FY08-13

JRO Accomplishments - Feedback and Assessment

- Analytical Studies
 - Expendable Equipment Combat Consumption (E2C2)
 - Point and Standoff Sensor Mix
 - Threat Agent Challenge
 - CBRN Installation Force Protection PDM III
- Experiments
 - Split MOPP
 - Sensitive Equipment Decon
- Capabilities Based Assessments
 - Passive Defense
 - WMD Elimination
 - WMD Interdiction
 - **Consequence Management (in progress)**
- Radiation/Nuclear Defense Quick Look Study
- Consequence Management Quick Look Study

JRO Accomplishments – Doctrine, Training & Experiments

- NORTHCOM, PACOM & EUCOM
- Joint CBRN Familiarization Course
- Joint Senior Leaders Course
- Intermediate & senior service colleges war games



Contact me:

COL Patrick J. Sharon
Deputy Director, JRO-CBRND
patrick.sharon@js.pentagon.mil
(703) 602-0843