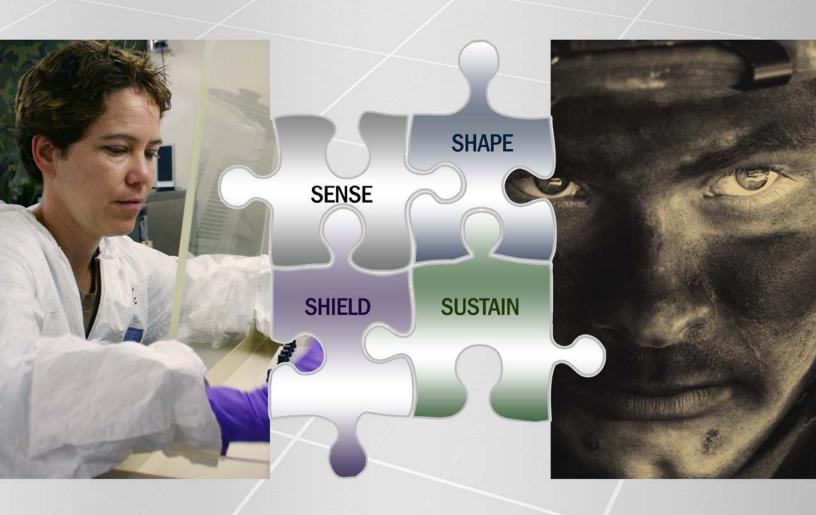




Sustaining the Competitive Advantage

# Chemical Biological Defense Program Strategic Plan

September 30, 2008



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1. REPORT DATE 30 SEP 2008		2. REPORT TYPE		3. DATES COVE 00-00-2008	RED 3 to 00-00-2008	
4. TITLE AND SUBTITLE				5a. CONTRACT	NUMBER	
Chemical Biological Defense Program Strategic Plan			5b. GRANT NUMBER			
					5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER			
			5e. TASK NUMBER			
			5f. WORK UNIT NUMBER			
<b>Department of Def</b>	ZATION NAME(S) AND AE ense,Assistant to the Biological Defense	e Secretary of Defer		8. PERFORMING REPORT NUMB	G ORGANIZATION ER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)			
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	Same as Report (SAR)	28		

**Report Documentation Page** 

Form Approved OMB No. 0704-0188



The purpose of this strategic plan is to focus and guide our actions in the Chemical and Biological Defense Program (CBDP). Our immediate responsibility is to develop, deliver, and support the systems that provide strategic resilience – systems flexible enough to detect, protect, and remediate attacks by terrorists or hostile forces using a variety of Weapons of Mass Destruction devices. Our future responsibility is to provide the direction the CBDP must take for the far-term.

This plan is grounded in our National Strategies and reflects our Strategic vision, mission, and goals. The CBDP vision is to ensure DoD operations are unconstrained by Chemical, Biological, Radiological, and Nuclear (CBRN) effects. The CBDP mission is to provide CBRN defense capabilities in support of our national military strategies. We undertake this vision and mission in partnership with Congress, other federal agencies, academia, international partners, and the private sector.

Central to the success of the CBDP is how we measure and report progress toward achieving the four overarching, interrelated strategic goals addressing our operational, future, institutional, and management program challenges. To this end, as a team we must remain forward thinking, responsive to warfighter and national security needs, and empowered with the accountability and authority vested in specific executives.

Fred S. Celec

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Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs

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#### **Executive Summary**

The Strategic Plan for the Chemical and Biological Defense Program (CBDP) outlines the strategic priorities – linked to the ends, ways, and means – to accomplish the CBDP four overarching and interrelated strategic goals that must be taken for the next 10 to 15 years in order to realize the CBDP vision and achieve the mission.

**Vision and Mission.** Chapter 1 provides the CBDP <u>vision</u> to ensure Department of Defense (DoD) operations are unconstrained by chemical, biological, radiological, and nuclear (CBRN) effects; the <u>mission</u> to provide CBRN defense capabilities in support of the National Military Strategies' specific mission areas for combating weapons of mass destruction (WMD).

**Strategic Environment.** Chapter 2 discusses the current and future strategic environment of sustained operations in an era of persistent conflict with both state and non-state actors. The greatest challenge faced by the United States comes from states or groups selecting the most lethal weapons they can obtain.

**Strategic Goals and Direction.** Chapter 3 describes the four CBDP goals with their 17 associated strategic priorities in Appendix A. These goals and priorities serve as the essential elements to providing both direction and scope for the Enterprise.

**Strategic Guidance.** Chapter 4 describes the ways, ends, and means to accomplish the CBDP vision, mission, and goals. The CBDP strategic "Ends" are to ensure viable CBRN defense capabilities are in place to create insurmountable conditions for a potential adversary's efforts, or to minimize the impact of WMD use. The "Ways" ensure future capabilities are applicable to passive defense, consequence management, force protection, and homeland defense. The "Means" are the resources necessary to sustain the program within the legislative, policy, and directive authorities.

**Balancing Risk.** Chapter 5 outlines the overarching risk guidance for the future to reduce, minimize, and negate risk associated with future potentially catastrophic CBRN threats to the Warfighter, and to ensure the processes and culture are in place across the CBDP to maintain this standard.

**Conclusion.** Chapter 6 summarizes the strategic goals of the CBDP Enterprise and the need to provide the Joint Warfighter with the best technologies and support through integrated, coordinated, and sustainable CBRN defense materiel and non-materiel solutions. To ensure DoD continues to lead the world in CBRN defense capabilities, the CBDP must obtain the necessary integrated solutions to support the National Military Strategies and ensure that DoD operations are unconstrained by CBRN effects.

#### **Chapter 1. Introduction**

The CBDP Strategic Plan intent is to influence ongoing near- and mid-term actions and provide the direction for the next 10 to 15 years, to realize the CBDP vision and achieve the mission. This strategy portrays the first comprehensive, integrated roadmap for the CBDP Enterprise by outlining the overarching direction for the organization.

The CBDP Enterprise is composed of all those organizations, people, facilities, and their associated processes that are responsible for producing CBRN defense capabilities for the Warfighter. For CBRN defense, the CBDP defines Warfighters as those individuals and units from Active Forces, Reserve Components, governmental and departmental civilians, and contractors that participate in the growing range of military operations worldwide.

The Enterprise is composed of the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD (NCB)) and the Special Assistant for Chemical and Biological Defense and Chemical Demilitarization Programs (SA(CBD&CDP)) as the Office of the Secretary of Defense (OSD) focal point. It includes the Program Analysis and Integration Office (PAIO), Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense (JRO-CBRND), Defense Threat Reduction Agency's (DTRA) Joint Science and Technology Office for Chemical and Biological Defense (JSTO-CBD), Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD), CBDP Test and Evaluation (T&E) Executive, and the Army as the Executive Agent (EA). Within the Executive Agent function are the capability enablers of Military Construction, the U.S. Army CBRN School (USACBRNS), logistics (supply/maintenance), and program analysis integration. Also included in the CBDP Enterprise is the Defense Logistics Agency (DLA). The Services, as part of the CBDP Enterprise, provide input through requirements developers, materiel developers, and T&E agencies. The Services also have the responsibility to fund and execute sustainment and conduct other post-fielding actions.

The CBDP Strategic Plan is a living document, updated biennially, to support future Program Objective Memorandum (POM) builds to address environment and emerging threat changes. This will enable more informed senior level decision-making by evaluating and providing associated organizational planning and budget actions in terms of established CBDP strategic goals and objectives.

The next step will be to produce an Implementation Plan to evaluate the long-term CBDP success in providing support to the Warfighter. The Implementation Plan will describe specific performance measures to assess performance in achieving the overarching program goals and the strategic priorities they support. The CBDP Enterprise strategic metrics should include an obligation of funds, the number of programs on schedule, and the number of items delivered to Warfighters as they relate to CBRN defense capabilities. The assessment should also address the completeness of key performance parameters (KPP) and project alignment to address Warfighter needs. The plan must also measure the alignment of S&T technologies to JPEO-CBD projects and the effectiveness of our T&E efforts. Finally, there is a need to assess preparedness of the CBDP through existing metrics.

At the strategic level, the CBDP primarily supports the combating weapons of mass destruction (C-WMD) passive defense mission area—measures to minimize or negate the vulnerability to, and minimize effects of, WMD use against U.S., partner, and allied Armed Forces as well as U.S. military interests, installations, and critical infrastructure. The CBDP supports the development of capabilities shared between the C-WMD mission areas of passive defense, consequence management, interdiction, and elimination operations. The CBDP also supports multiple national strategies that address the strategic environment of deterring and preventing adversary use of WMDs. Specifically, the CBDP supports the *National Strategy to Combat Weapons of Mass Destruction*, which states that the gravest danger for our nation lies at the crossroads of radicalism and technology. Supporting this Strategy requires cooperative initiatives with international, interagency, and industry partners to field key capabilities today and maintain technology thrusts ensuring the Warfighter possesses state-of-the-art capabilities now and in the future.

This Strategic Plan leverages and contains key elements primarily drawn from 12 strategic documents. The CBDP supports the *National Strategy to Combat Weapons of Mass Destruction* counterproliferation pillar to combat WMD use and consequence management pillar to respond to WMD use. The remaining documents include the *National Military Strategy to Combat Weapons of Mass Destruction*, DoD strategy for Homeland Defense and Civil Support, 2008 Chairman, Joint Chiefs of Staff's (CJCS) Posture Statement, 2006 *Quadrennial Defense Review (QDR)*, and the strategic goals from the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Implementation Plan.

Internal to the CBDP are the CBDP Research, Development, and Acquisition (RDA) Plan; JRO-CBRND 2008 Modernization Plan, JPEO-CBD 2008 Modernization Strategy, JSTO-CBD DoD S&T Strategy, T&E Infrastructure Investment Strategy, and the Fiscal Year 2010 to 2015 CBDP Program Strategy Guidance (PSG). This Strategic Plan reviewed the goals, objectives, principles, initiatives, frameworks, and guidelines of all aforementioned documents to ensure a linkage and support to major CBDP goals.

The CBDP must continue to provide medical and non-medical CBRN defense capabilities by providing an effective multi-layered set of protective measures to minimize chemical and biological warfare agent effects and developing medical countermeasures in conformance with Food and Drug Administration (FDA) licensure regulations and protocols, thereby allowing the restoration of essential operations with minimal or no degradation. The CBDP has two narrow responsibilities with regard to the operational and clinical effects of radiological and nuclear sources (ionizing radiation) to preclude human performance degradation. First, the CBDP funds RDA activities limited to specific types of radiation detection devices and modeling and simulation capabilities. Second, the CBDP coordinates extensively with other DoD offices and non-DoD federal agencies that are directly involved with medical countermeasure development to treat the physiological effects of radiological and nuclear ionizing radiation exposure and/or contamination. The CBDP is postured to provide these capabilities to ensure interoperability for CBRN defense capabilities for the Warfighter.

The CBDP requires an integrated collection of systems, multi-disciplinary approaches, well-developed doctrine and concepts, modern and robust laboratories and associated infrastructure,

highly skilled researchers, an understanding of requirements for homeland security, an awareness and appreciation of critical emerging and non-traditional threats, and timely industrial support. The CBDP must be agile enough to adapt and align programs with other departmental and governmental programs to meet national and military strategies, including support to homeland defense. This agility must focus on quickly countering asymmetric threats. Meeting these requirements will produce a Department-wide risk-informed investment strategy that reflects Joint warfighting priorities, identifies key outputs, balances near- through far-term actions for capability development, and ensures strategy-driven, affordable, and achievable outcomes. The CBDP must support the DoD transformation process by both anticipating and seeking to influence the future.

#### Vision, Mission, and Strategic Goals

The vision of the CBDP is to ensure that DoD operations are unconstrained by CBRN effects. The mission of the CBDP is to provide CBRN defense capabilities in support of the national military strategies. This mission includes all aspects of developing capabilities in support of CBRN defense in support of specific mission areas for combating WMD. The *QDR* highlighted the need for specific capabilities within the CBDP, including improved standoff detection capabilities and improved medical countermeasures against chemical and biological threats that meet FDA licensure regulations and protocols.

The CBDP mission is composed of four overarching and interrelated goals that frame strategic success. They combine to provide the essential integrated, coordinated, and sustainable CBRN materiel and non-materiel interoperable solutions to Joint Warfighters. These four overarching goals are based on the four major defense challenges described in the national military strategies. They are:

- 1. Provide operational capabilities to the Joint Force to ensure they are prepared to operate successfully within all Combatant Commanders' (COCOM) areas of responsibility in current CBRN threat environments
- 2. Define and develop future capabilities to increase significantly our ability to dissuade, deter, defend against, and defeat any future adversary in any CBRN threat environment
- 3. Sustain the capability of the Joint Force to operate jointly and provide an effective response in any CBRN environment
- 4. Improve management practices to fulfill Enterprise strategic roles and missions, meet the requirements of 50 U.S.C. 1522 and 1523, and ensure effective and efficient use of department resources in accordance with the priorities established in our National Military Strategies

#### Conduct of the Chemical and Biological Defense Program

Section 1522 of title 50, United States Code, requires the Secretary of Defense to assign responsibility for overall coordination and integration of the chemical and biological warfare defense program and the chemical and biological medical defense program to a single office within the OSD. The Secretary assigned this responsibility to the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)), creating a

focal point within the DoD for CBRN defense. The CBDP Enterprise is developing an integrated portfolio of systems to deliver capabilities to Warfighters.

Section 1523 of title 50, United States Code, requires the DoD to provide an annual report to Congress on accomplishments and assessments in two broad areas:

- 1. The overall readiness of the Armed Forces to fight in a CBRN warfare environment, along with efforts undertaken and ongoing plans to improve such readiness
- 2. Program requirements, including training, detection, protective equipment, decontamination equipment, medical prophylaxis, and treatment of casualties resulting from the use of CBRN weapons

# <u>Process and Organization – Chemical and Biological Defense Program Components, and Leadership.</u>

The USD(AT&L) approved the process and organization established to achieve the CBDP mission on April 22, 2003, in the Implementation Plan for the Management of the CBDP. The Implementation Plan assigns the SA(CBD&CDP) as the principal deputy for CBDP matters and the primary staff action office for the ATSD(NCB) to lead, guide, and integrate the CBDP. The ATSD(NCB) is the focal point within OSD for CBRN defense and oversees acquisition-related efforts for the CBDP for the USD(AT&L)/Defense Acquisition Executive (DAE). The ATSD(NCB) also ensures coordination and cooperation with OSD partners for the CBDP, specifically with the Office of the Under Secretary of Defense (Personnel and Readiness) (OUSD(P&R)), Office of the Assistant Secretary of Defense (Health Affairs) (OASD(HA)), and Office of the Under Secretary of Defense (Policy)(OUSD(P)). This coordination and cooperation extends to the Department of Homeland Security (DHS), Department of Health and Human Services (DHHS), and other federal agencies to leverage CBRN defense initiatives, and research and development (R&D) efforts.

The JRO-CBRND establishes priorities and needs for the program developers. The JSTO-CBD initiates and executes S&T programs that provide the technical basis of improved or future capabilities. The Army as the EA for CBRN defense programs, coordinates and integrates research, development, test and evaluation (RDT&E) and acquisition requirements for the military departments. The JPEO-CBD further develops and fields materiel capabilities and provides centralized program management and Joint Service CBDP acquisition program integration. The Army as the EA coordinates and integrates acquisition through the JPEO-CBD, who reports to the DAE through the Army Acquisition Executive. The PAIO as part of the Army's EA role in reviewing all funding in the CBDP, provides independent analysis and integration functions for the CBDP. The CBDP T&E Executive oversees T&E infrastructure and ensures adequacy of testing. Under the direction of the JRO-CBRND, the Joint Combat Developer for Experimentation for Chemical, Biological, Radiological, and Nuclear Defense (JCD-CBRND) coordinates and oversees execution of Joint and Multi-Service experiments used to validate Joint concepts for CBRN defense.

To support this DoD Strategic Plan, the CBDP must identify strategic goals with an implementation methodology, methods of attaining those goals, and specific measures to assess progress. The following CBDP oversight objectives further support the four overarching goals:

- Assess and evaluate the effectiveness of the CBDP Enterprise in addressing both current and future needs
- Develop guidance and direction, and implement change in the CBDP with existing or additional directives and policy as may be necessary or appropriate
- Coordinate and integrate the activities of the CBDP Enterprise with related activities of DoD components, the interagency, and the international community
- Ensure that all areas in the CBDP Enterprise are in accordance with the intent of Congress and the DoD
- Conform to all statutory requirements identified in the Acquisition Cycle and described in Department of Defense Directive (DoDD) 5000, USD(AT&L) guidance and the System Engineering Process articulated by the Defense Acquisition University (DAU)
- Monitor the development and transition of technologies from S&T to advanced development and acquisition to ensure the availability of advanced technologies to close capability gaps and meet the needs of the Warfighter
- Establish and carry out a process for periodic review of CBDP execution
- Report to DoD and Congress on the continuous assessment of the entire CBDP in accordance with department and Congressional mandates on assessment results, including shortfalls, and recommended areas for improvement, as well as anticipate impacts to other areas within the DoD.

#### **Chapter 2. The Strategic Environment**

The current and future strategic environment is one of sustained operations in an era of persistent conflict with both state and non-state actors. The DoD will continue to conduct operations against these adversaries in various places under varying conditions for the future. These adversaries use irregular warfare to pursue ideological and political goals, including the willingness to elicit catastrophic effects with WMD. The 2008 National Defense Strategy (NDS) defines the strategic environment as a global struggle against extremist ideology that seeks to overturn the international nation-state system. Beyond this transformational struggle, we face other threats including a variety of irregular challenges, including the quest by rogue states for nuclear weapons, and the rising military power of other states.

The threat associated with a WMD attack has evolved over recent decades. The WMD programs undertaken by nation states remain the primary focus of the DoD's CBRN defense programs. The potential that our opponents in overseas operations might use CBRN weapons continues to drive development, acquisition, and integration of a modernized generation of military CBRN defense capabilities. Simultaneously, a significant effort is underway to anticipate and develop countermeasures to asymmetric attacks by foreign and domestic non-state actors. This requires necessary threat assessments and we must acknowledge the difficulty in collecting reliable intelligence on WMD programs and activities. This assists in the identification of operational

gaps that guide the development of CBRN capabilities; however, the U.S. must expect further intelligence gaps and surprises. The DoD must continuously develop new CBRN defense capabilities in anticipation of the continued evolution of WMD threats.

# Chapter 3. Strategic Goals and Direction – The Chemical and Biological Defense Program Strategy Map

Planning for improved capabilities requires a balanced investment between current and future risks. Balance for the CBDP is the sufficient effort to achieve a strategic objective or purpose based on validated operational requirements and priorities established by department policy, using existing processes, established in the DoD and within the CBDP. The CBDP must also act in coordination with other agencies for an effective national effort while conducting the continuous transition of technologies from laboratory concepts to fielded systems for both non-medical and medical systems, using broad-spectrum, multi-benefit approaches wherever possible to address a wider range of challenges. The four CBDP goals established in this document frame the far-term:

- 1. Continue to provide operational capabilities to the Joint Force to ensure they are prepared to operate successfully within all COCOM areas of responsibility in current CBRN threat environments, including support to passive defense, consequence management, force protection, and homeland defense. The CBDP must continue to ensure the doctrine, organizations, training, materiel, leadership and education, people, and facilities (DOTMLPF) domain integration of CBRN defense capabilities for the Joint Force to operate successfully within all COCOM areas of responsibility under current CBRN threat conditions. This ongoing effort will build upon the successes of existing activities and programs to improve current CBRN defense capabilities, minimize costs, and avoid duplication of efforts, while simultaneously acting as a bridge to future capabilities to help mitigate future risk and meet Warfighter needs in a timely fashion.
- 2. Define and develop future capabilities to increase significantly our ability to dissuade, deter, defend against, and defeat any future adversary in any CBRN threat environment. The CBDP must develop future capabilities enabling the Joint Force to operate successfully against future CBRN threats. It is difficult to collect reliable intelligence on WMD programs and activities for they are closely guarded secrets. The United States must expect further intelligence gaps and surprises; consequently, the DoD must develop new defensive capabilities in anticipation of the continued evolution of WMD threats. This requires the program to address projected shortfalls in a timely, integrated, and prioritized manner to ensure the elimination and mitigation of gaps for all future threats. This effort will also help to ensure the CBDP places the correct focus on the most critical CBRN defense capabilities required. The CBDP must identify high payoff technologies for accelerating delivery of CBRN defense capabilities to the future Warfighter to ensure the acquisition of technologies that meet multiple CBRN defense requirements. The CBDP needs to take advantage of commercial sources and systems to leverage the stateof-the-art in S&T. It is imperative that the program quickly transform these technologies into an end item and place them into the hands of the Warfighter to maximize the overall success of the CBRN defense mission.
- 3. Sustain the capability of the Joint Force to operate jointly and provide an effective response in any CBRN environment. The CBDP must consistently support our ongoing

and future sustainment activities for current capabilities required by Joint Forces to conduct CBRN defense operations. In support of this endeavor, the program must fully accelerate the transition of CBRN defense activities and products to the Services. This effort includes the development and integration of non-material solutions required to ensure that capabilities properly enable Joint Forces. The program must continue to evolve to an organizational culture that focuses on identifying, promoting, and integrating key non-material initiatives, which complement any technological advances. The program's responsibility will be to ensure that DOTMLPF domains effectively benefit from CBRN defense technologies. The CBDP must support the development of transformed CBRN defense-related training to the Warfighter to ensure the proper use of CBRN defense technologies, products, and systems now and in the future.

4. Improve management practices to fulfill Enterprise strategic roles and missions, meet the requirements of 50 U.S.C. 1522 and 1523, and ensure effective and efficient use of department resources in accordance with DoD priorities. Improving selected management practices where required also ensures department resources are used in accordance with the goals and objectives established within DoD strategic guidance documents. It is an imperative that the CBDP achieves those mandates established for the program from Congress and the DoD.

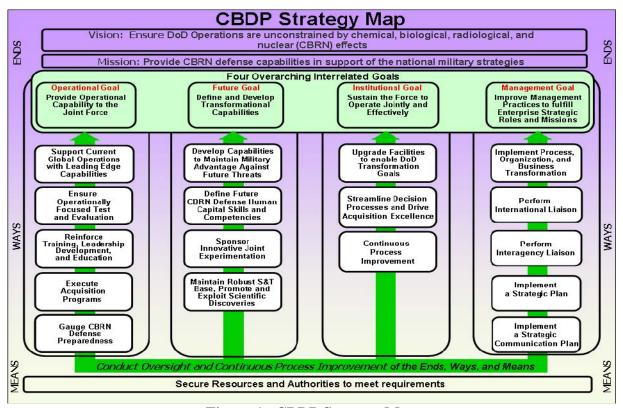


Figure 1. CBDP Strategy Map

The CBDP Strategy Map (Figure 1) serves as the pictorial representation of the alignment of goals and strategic priorities within the ends, ways, and means construct for the CBDP Strategy. To support the four overarching strategic goals, the CBDP has established 17 strategic priorities.

These priorities are by design and intent the unifying major activities (ways) within the CBDP. The CBDP also aligns each strategic priority with one of the corresponding strategic goals (see Figure 1 above). Together the four goals and their associated strategic priorities serve as the essential elements to provide both direction and scope for the Enterprise. It is important to note that many of the strategic priorities also influence other goals. The strategic priorities have offices of primary and collateral responsibility (OPR and OCR) designated from the CBDP components to clarify linkages to those priorities. The strategic priorities and the OPR/OCR designations are at Appendix A.

#### Operational Goal: Provide Operational Capability to the Joint Force

Support Current Global Operations with Leading Edge Capabilities. The CBDP must provide the needed, leading edge capabilities in the required amounts to the Warfighter in the current struggles across the globe and within the homeland. The diversity of CBRN threats demands capabilities against known threats today, as well as emerging threats in the future. It is essential for the CBDP to possess the organizational agility to provide required capabilities and the necessary responsiveness to ensure effective and timely solution integration across the DOTMLPF domains on behalf of the current Joint Force in ongoing operations. Solution integration for the CBDP must be comprehensive to sustain the current Force in ongoing operations, while preparing for the future. The CBDP will conduct a deliberate modernization effort to both update and sustain legacy CBRN defense systems to achieve desired outcomes. A near-, mid-, and far-term modernization plan for legacy systems requires the development and deployment of an effective and affordable family of integrated and interoperable capabilities to the joint force. The modernization plan must always address the developmental elements of testing and R&D while continuously organized within the four CBRN defense operational elements. Those four operational elements are:

- 1. Sense the capability to provide continuously information about the CBRN situation by detecting, identifying, and quantifying CBRN hazards in air and water and on land, personnel, and equipment or facilities;
- 2. Shape the capability to characterize the CBRN hazard to the Force Commander;
- 3. Shield the capability to protect the Force from degradation caused by CBRN hazards by preventing or reducing exposures, applying prophylaxis to prevent or mitigate negative physiological effects, and protecting critical equipment; and
- 4. Sustain the capability 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.

The CBDP will continue to support the role of the JPEO-CBD as the Total Life-Cycle Systems Manager within the Services' sustainment plans, and consistently describe business process improvements implemented and planned to facilitate Joint sustainment of legacy systems. The CBDP will also establish and maintain an overall modernization approach for any given time in the future.

<u>Ensure Operationally Focused Test and Evaluation</u>. A critical component of defense acquisition is robust and credible T&E to ensure operational effectiveness, suitability, and survivability of

CBRN defense equipment. The strategic enablers that will facilitate execution of CBDP component goals for T&E include an appropriately sized, located, and modernized T&E infrastructure, insuring innovative approaches for new and expanded surety test chambers and field simulant testing in operationally relevant conditions. The CBDP T&E community is dependent upon a highly trained workforce of scientists and test engineers. This workforce is an integral part of the test infrastructure and T&E must rigorously maintain this standard. Future T&E efforts must also provide early Operational Test Activity involvement, in support of CBDP projects and establish and continue to develop and maintain a common set of processes and standards for the conduct of CBRN T&E that determines a system's capabilities and limitations with regards to KPPs.

Reinforce Training, Leader Development, and Education. CBRN defense doctrine, training, leadership, and education are key non-materiel components of a fully integrated CBRN defense capability. These DOTMLPF elements have a profound effect on the ability of U.S. Armed Forces to carry out their mission while countering CBRN threats on the battlefield and in defense of the U.S. homeland. The Secretary of Defense has consolidated most DoD non-medical CBRN defense-training activities at the USACBRNS and these co-located activities must continue to work toward the development of maximum joint integration and coordination. The CBDP will continue efforts to gain optimal joint efficiencies where possible through integration and synchronization across non-materiel solutions for the Joint Force to include enhanced senior leader education. This synchronization must eventually include those medical education and training activities as well wherever they may be located.

Execute Acquisition Programs. The future strategic enablers required to facilitate execution of CBDP component goals for systems acquisition include an appropriately sized, located, and modernized systems acquisition infrastructure; tactical acquisition and systems engineering excellence; and a highly trained and skilled workforce. The CBDP will apply its resources to obtaining effective, suitable, and sustainable CBRN defense capabilities required to support the National Military Strategy to Combat WMD and the Department's force planning construct of homeland defense, war-on-terror, irregular warfare, and conventional campaigns. For the next two decades, the CBDP must keep a focused systems acquisition portfolio to field the highest priority, affordable increments of militarily useful, logistically supportable, and technically mature capabilities for every future POM to achieve Warfighter needs. The CDBP will use the principles of evolutionary acquisition and spiral development to achieve revolutionary capabilities. The CBDP must increase emphasis on CBDP systems integration across all Major Defense Acquisition Programs (MDAP) now and in the future.

Gauge Chemical, Biological, Radiological, and Nuclear Defense Preparedness. In order to implement this priority for the Strategic Plan, a CBRN Defense Preparedness Assessment is under development to portray the preparedness of today's Forces for developing capabilities to meet future challenges. The CBRN preparedness metrics will align against current mission areas, and subsequently to supporting capabilities, or existing capability gaps. The CBRN Defense Preparedness Assessment Process will use existing service readiness reporting tools and databases, and it will be developed and incorporated into the implementation plan for this strategic plan and it will reflect guidance from ongoing non-materiel efforts in the CBDP.

#### Futures Goal: Define and Develop Transformational Capabilities

Develop Capabilities to Maintain Military Advantage Against Future Threats. It is essential for the CBDP to establish the direction for future desired capabilities and then ensure achievement of these capabilities. Ideally, the CBDP must conduct boundary-less coordination of research and engineering investments and continuously refine our processes to provide warfighting advantage. The JSTO-CBD must continue to provide the most innovative capabilities by collaborating with mission partners, the Services, other government agencies, industry, and academia. Leveraging threat assessments from both national and department intelligence organizations, the CBDP must understand and focus on the most critical CBRN defense capability shortfalls now and in the future. This requires a critical effort to identify those current operational gaps and vulnerabilities while predicting and ascertaining future gaps and vulnerabilities as they evolve based on the intelligence community's threat assessments. This includes DoD efforts to support homeland defense where the Department's strategic goal is to secure the United States from direct attack. Resulting implications for the CBDP are in passive defense, consequence management, force protection, and homeland defense, and in actions to defend against, respond to and recover from WMD use.

The CBDP must develop both medical and non-medical capabilities with the DoD strategic goals and implications at the forefront. Medical CBRN defense must develop technological capabilities to counter future threats by providing individual-level prevention and protection to preserve warfighting strength. An example is the ongoing Transformational Medical Technologies Initiative (TMTI) where success in the program will mean obtaining a broad spectrum biodefense capability to respond to emerging infectious disease, traditional agent, or engineered biological agent threats.

<u>Define Future Chemical, Biological, Radiological, and Nuclear Defense Human Capital Skills and Competencies</u>. The CBDP Enterprise must possess the necessary human capital to drive capabilities development now and in the future. CBDP S&T and T&E facilities must have state-of-the-art (or advanced) technology, as well as the civilian intellectual infrastructure, to both preserve and advance CBRN defense knowledge and special skills required to ensure the CBDP vision and mission. This organizational requirement demands that the Enterprise continuously recruit and retain a high performing, agile, and ethical workforce to meet DoD standards for personnel. In addition, the Department should focus on continuous improvements to personnel policies. The program must possess an understanding of required workforce competencies to serve as the basis for recruiting, developing, and training the future CBDP workforce.

Sponsor Innovative Joint Experimentation. The continuously evolving global environment creates a constant need for the CBDP to provide innovative approaches to solve complex problem sets. The CBDP must support the continuing reorientation of the Department's capabilities and Forces to be more agile in a time of conflict to prepare for wider asymmetric challenges and hedge against uncertainty over the next two decades. This reality creates a need to both sponsor and guide experimentation for both medical and non-medical CBRN defense capabilities. Applied S&T demonstrations are examples of this experimentation priority. Commercial off-the-shelf (COTS) product integration will always be required to fully exploit and achieve innovative Joint experimentation. The program will continue to test and evaluate promising technologies for possible transition to acquisition.

Maintain Robust Science and Technology Base and Promote and Exploit Scientific Discoveries. The program will continue to segment the goals of S&T into the following key thrusts:

- Transition technologies
- Ensure a robust S&T base
- Answer science questions
- Enterprise excellence

Numerous CBDP S&T initiatives will produce advanced capabilities against emerging threats in the future. S&T efforts must focus on and invest in those revolutionary technologies that will increase future protective capabilities. CBDP S&T efforts must also address casualty prevention (prophylaxis pretreatment) against biological threats, to include the transition to systems acquisition of antimicrobial and antiviral compounds currently under development against validated biological threat agents, and to establish the future conditions necessary to negate any effects from these agents. Finally, S&T in support of the medical advanced developer, will fully address the FDA-licensure of medical countermeasures currently in initiation and execution stages of technology development.

#### Institutional Goal: Sustain the Force to Operate Jointly and Effectively

<u>Upgrade Facilities to Enable Department of Defense Transformation Goals.</u> The DoD requires appropriately sized, located, and modernized core physical infrastructure with clearly defined missions, goals, and advocacy. This infrastructure continues to require revitalization and modernization to anticipate the future, counter an expanding threat space, exploit advances in technology, and speed the transition of emerging candidate technologies into systems acquisition programs across the sense, shape, shield, and sustain capability areas. The possibility that limited resourcing could occur in this area accentuates this effort, an area where risk has been taken historically. These fiscal realities are likely to drive an even leaner infrastructure within the time horizon of this strategy and consequently create a more acute future situation requiring any number of actions to consolidate, reorganize, and shift resources and infrastructure to meet CBDP operational demands. The CBDP is working to recapitalize and revitalize the defense RDT&E and training infrastructure that supports the development of CBRN defense capabilities. The CBDP must also act to reduce and eliminate redundant test activities through enhanced interagency information sharing and implementation of integrated test planning tools.

It is imperative that the Department establish and maintain state-of-the-art research and test facilities and associated intellectual capital to foster world-class mission-critical research. As such, the Services' laboratories, university partnerships, international collaborations, and contractor laboratories performing CBRN related activities must have the physical and intellectual infrastructure necessary to:

- Preserve CBRN defense knowledge and special skills
- Provide objective advice regarding scientific issues
- Provide consultation during the acquisition process
- Interpret scientific understanding

- Support fielding new systems
- Rapidly respond to new and immediate threats

Streamline Decision Processes and Drive Acquisition Excellence. The USD(AT&L) approved Implementation Plan for the Management of the DoD CBDP dated April 22, 2003 and amended July 10, 2006 and October 1, 2007, defines organizational roles and responsibilities and provides implementing procedures for management of the CBDP. The ATSD(NCB) is required to continually review and assess the plan to allow evolution and improvement to the management and execution of the CBDP. At a minimum, this encompassing review will address management initiatives and the alignment among the programs for requirements, S&T, advanced development, T&E, and procurement that are under DoD purview. To this end, the CBDP is in the process of preparing a DoDD that will incorporate the roles and relationships among the CBDP components that are presently contained in the Implementation Plan. The objective is to maintain this cyclical review process to ensure the CBDP facilitates DoD decision processes while using best business practices on behalf of the Warfighter.

Continuous Process Improvement. The CBDP will use existing DoD systems and processes to the maximum extent possible to provide program oversight. The OSD CBDP Secretariat will also institute strategic, actionable metrics for the Enterprise to streamline oversight and integration of the Enterprise portfolio across the Acquisition Cycle. These strategic metrics will be consistent with USD(AT&L) guidance, DoD decision support systems, processes, and regulations; and will be used to monitor Enterprise strategic trends and progress, provide a means to anticipate Enterprise-wide programmatic and resource challenges, initiate timely corrective actions, and optimize total ownership costs. These efforts will refine the oversight process and the intent is to set the conditions for greater CBDP Enterprise-level improvements. with a focus on Continuous Process Improvement in implementation of goals aligned to warfighter-driven, outcome-based metrics. Greater transparency and understanding of facts and status will support informed decisions throughout the CBDP. Decision makers will be informed of the true status of programs, budget, requirement changes, technology risks, and progress toward cost, schedule, and performance goals. In addition, the CBDP will advise decision makers on the maturity of business processes that could impact program performance and success. This will increase effectiveness within institutionalized processes to gain greater efficiencies and integration among capability requirements, supporting science and technology, test and evaluation infrastructure, and system development and demonstration. Finally, the CBDP actions must provide the basis for CBDP Enterprise optimization across DOTMLPF to maximize delivered capabilities to the Warfighter.

## Management Goal: Improve Management Practices to Fulfill Enterprise Strategic Roles and Missions

<u>Implement Process</u>, <u>Organization</u>, <u>and Business Transformation</u>. The CBDP must seek those processes, organizational, and business transformation opportunities across a number of crosscutting capabilities and activities critical to enabling the CBDP strategy. These areas of emphasis include strategic partnering and outreach, preservation of intellectual capital, scientific stewardship, agile technology transfer processes, risk reduction through competition, continuous process improvement, streamlined acquisition processes, strengthened interagency partnerships

and collaboration among Services, building international partnerships, DOTMLPF integration activities, and recapitalization of infrastructure critical to CBDP mission areas.

Perform International Liaison. The CBDP must integrate international cooperation with the farterm goal of furthering capabilities for the future. This requires concerted effort in the near- and mid-term to strengthen international cooperation, integrate bilateral and multilateral cooperation, and support global partnerships against the spread of WMD. The far-term goal for the DoD is to increase partnership capacity and strengthen alliances and partnerships, and the CBDP must support this effort. To facilitate these objectives, the CBDP must support DoD efforts to build partnership capacity on all matters pertaining to CBRN defense, improve national and international capabilities for homeland defense and homeland security, and develop the desired capabilities needed to conduct effectively an active, layered defense against transnational threats, including CBRN attacks. In the near- and mid-term, the CBDP must continue to use and expand upon a number of different types of international mechanisms including the following:

- Exchange of information through data exchange agreements
- Loans of equipment and materiel to foster commonality
- Exchange of personnel
- Technical Panels (S&T)
- Cooperative R&D through international Memoranda of Understanding (MOU)
- U.S. investments in the purchase of foreign equipment for testing and making available DoD equipment for purchase

DoD participants in CBDP-related international programs will coordinate their activities with the USD(AT&L) International Cooperation office and the SA(CBD&CDP) to ensure their activities meet these requirements and speak with one voice on behalf of the DoD and U.S. Government.

In the far-term, the CBDP must continue to leverage all potential international partnerships to support all phases of development for CBRN defense. This includes government to government partnering in RDA as an essential part of the U.S. national strategy. The U.S. will continue to operate in future coalition environments, with the goal of achieving maximum interoperability efficiencies through DOTMLPF integration with selected partners, while also achieving a degree of interchangeability and commonality with specific international partners in CBRN defense.

<u>Perform Interagency Liaison</u>. The CBDP is ultimately responsible for overseeing, coordinating, and integrating the activities of the CBDP Enterprise with related activities of other DoD components, the interagency and the international community. To increase DoD overall effectiveness in the War on Terrorism into the future, the program must improve and enhance interagency effectiveness. The first strategic interagency goal for the U.S. government is to develop the capacity of other agencies and state and local governments to respond to domestic incidents so they are capable of performing their assigned responsibilities with minimal reliance on U.S. military support. While the DHS and DHHS exercise lead federal agency responsibilities in these areas, the DoD and the CBDP must do their part to strengthen homeland defense and homeland security into the future and continue the development of broad-spectrum

medical countermeasures against the threat of genetically engineered bio-terror agents. Additional initiatives must continue to include developing advanced detection and deterrent technologies and facilitating full-scale civil-military exercises to improve interagency planning and coordination for homeland security contingencies. The CBDP must develop future capabilities for homeland defense by collaborating with DHS as the DoD representative on CBRN defense issues. The CBDP must also assist in the development of consequence management capabilities for those DoD Forces validated as part of the DoD response in accord with the National Response Framework and as directed by OSD.

CBDP Components shall continue to conduct collaborative exchanges within and among principal investigators, Service laboratories, intergovernmental agencies, international allies, private sector associates, and academic partners for the future. The achievement of success in interagency activities will continue to require scientific and technical exchanges, partnerships, and cooperation. Finally, the program will be required to continue support to research programs based in DoD Service laboratories to ensure preservation of scientific expertise, intellectual critical mass, and infrastructure while concurrently maintaining an appropriately balanced investment portfolio across all external coordination activities.

Implement a Strategic Plan. The CBDP requires a Strategic Plan that addresses scope and direction across the CBDP Enterprise, while providing the necessary direction and strategic level integrating mechanisms to fulfill the vision and mission. It is important to realize the program's potential by implementing efforts within the Enterprise to achieve tangible and measurable results. CBDP stakeholders must implement their respective portions of the strategy to build towards achieving the Enterprise mission and realizing the vision. Only through the judicious creation and implementation of the strategic plan will the CBDP fully support the Warfighter now and in the future. This plan provides the DoD with a construct that describes, communicates, and links CBDP goals and objectives in a comprehensive and integrated roadmap. Finally, this plan will enable the DoD to conduct CBDP oversight by directly addressing strategic direction for the first time in the organization's 15 years.

Implement a Strategic Communication Plan. The CBDP Enterprise requires an Enterprise-wide Strategic Communication Plan that establishes the scope and direction for integrated persistent, consistent, and persuasive strategic communications activities. The SA(CBD&CDP) will lead the development of a CBDP Strategic Communication Plan biennially following each update or revision of the CBDP Strategic Plan. The CBDP will establish program-wide goals, themes, and products for effectively communicating CBDP Enterprise objectives and a methodology for recording input for prioritizing engagement efforts and subsequent taskings, a CBDP Strategic Communication synchronization calendar, and pertinent questions and answers as they are developed. The CBDP Enterprise will establish strategic communication working groups in coordination with component planners with the purpose of periodically reviewing all strategic goals, themes, messages, and products to ensure that they are accurate and appropriate and used as a basis for communicating CBDP Enterprise objectives with stakeholder requirements as a critical component of this effort.

#### Chapter 4. Strategic Guidance – Ends, Ways, and Means

#### **Ends**

The CBDP must support and achieve two conditions or measures of success in order to accomplish its four strategic goals and achieve both mission and vision support of the U.S. effort for combating WMDs. The first strategic measure of success is that CBRN defense capabilities are in place to deter significantly a potential adversary's efforts to achieve their desired effects of creating a catastrophic event with WMD. The second strategic measure of success is should a catastrophic event with WMD occur, effective CBRN defense capabilities are in place to quickly neutralize, contain, or protect to minimize any operational impact regardless of the operational setting. "Catastrophic event" is defined in Joint Publication 1-02 as any natural or man-made incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions. The term neutralize denotes actions to render the WMD ineffective while contain is to stop or hold the WMD effects in a given area and prevent any part of those effects from spreading elsewhere.

Therefore, U.S. strategic ends are to prevent the catastrophic use of WMD against U.S. interests or, should prevention fail, minimize the impact of that WMD use, where robust CBRN defense capabilities will act as the primary enabler to ensuring this outcome.

#### Ways

Program Alignment with Strategy. The four overarching CBDP goals and 17 supporting strategic priorities serve to guide direction and eventually measure progress in the program. However, the overarching sequence and imperative for the CBDP is to first support the Warfighter in current operations, and second to develop future CBRN defense capabilities in support of the next generation of Warfighters. The goals and priorities serve as the strategic integrating mechanisms to both feed and drive future capabilities through the adoption of methodologies and actions to achieve desired capabilities in the far-term. The implications of the CBDP goals and strategic priorities will influence other CBDP planning efforts. Examples are the PSG focus areas that serve as the extension of the program's strategic priorities. The total effect of the CBDP goals and strategic priorities are to direct the development of those required capabilities that allow for the Department's flexibility and adaptability concerning operational, future, force management, and institutional goals. The CBDP must be agile enough to continue a program focused on a well-defined battlefield, while understanding the implications and incorporating other governmental and departmental programs to meet national and military strategies where possible. This will ultimately produce a CBDP that fully supports Department-wide strategies with the necessary transparency to facilitate capabilities developments across the interagency.

The CBDP must maintain a balanced portfolio that describes programmed activities and reflects the program's most-likely delineation of investments for the future while addressing the near to mid-term implications. Balance in the CBDP is the sufficient effort to achieve a strategic objective or purpose based on validated operational requirements and priorities established by

<sup>&</sup>lt;sup>1</sup> PSG: Program Strategy Guidance for the development of the biennial Program Objective Memorandum, the PAIO leads under the direction of the SA (CBD&CDP) and approved by the ATSD (NCB).

department policy. Operational requirements and department priorities must reflect Warfighter needs and consequently drive CBDP investments. The CBDP must maintain the organizational agility to meet these needs. The unpredictability of future priority shifts will no doubt change the breakout of investments in the future for near-term procurement, advanced development, and improvements to infrastructure and expenditures for S&T for continued future capabilities. CBDP investments must always consider business implications, as well as industrial base considerations. The CBDP Enterprise will obviously base investments on the threat in a changing environment, linked to the national strategies, and use existing DoD processes.

The CBDP can achieve its strategic goals and priorities through ensuring key future capabilities structured within the four current essential CBRN defense operational elements (sense, shape, shield, and sustain) for passive defense, consequence management, force protection, and homeland defense. This approach focuses on optimizing both materiel and non-materiel solutions in an approach that is an integrated and interoperable architecture. By building a portfolio of capabilities that are robust and agile across the spectrum of possible requirements, including requirements to support homeland defense, the CBDP will give Joint Forces the required CBRN defense capabilities to operate effectively within CBRN-contaminated environments.

#### Means

The means required by the CBDP to accomplish the ways and achieve far-term success include all of the resources of the program and its extended supply chain including infrastructure; the program's skilled human capital; the processes to develop CBRN defense capabilities; and finally, the necessary funding to enable the program. The CBDP must maintain and continuously improve these resources and ensure efficient and expeditious availability of resources to all components, expending those resources on the development of current and future required capabilities. The resources made available to the CBDP are the primary tools for achieving a balanced set of programs that respond to the guidance and priorities required to support the national strategies. The CBDP must operate and use these resources within established legislative, policy, and directive authorities to ensure both vision and mission achievement. With the support of the President, the Secretary of Defense, and Congress, the CBDP has continued to develop and resource an integrated CBDP to best serve the nation, to build readiness for current and future challenges, and to sustain our Armed Forces in time of conflict. To continue countering the existing and future CBRN threats, as well as to meet the critical operational needs of our military, the DoD will require full support into the future.

The program must integrate all CBDP resources in a purposeful manner designed to reduce comprehensively future risk—these are defined as resource shortfalls, resource missapplications, or capability shortfalls that are not addressed. To execute effectively for the next 10 to 15 years, the CBDP depends on continued Congressional support in three priority areas:

- 1. Consistent resources for the overall program to ensure that, year after year, the CBDP is able to field improved defensive capabilities essential to ensuring our military can operate in any environment, unconstrained by CBRN threats
- 2. Adequate funding for the TMTI to exploit fully the advanced S&T innovation necessary to counter successfully future genetically engineered biological weapons and any newly

- emergent or bioengineered pathogen. This will improve the nation's military health infrastructure to deal with changing and emerging threats
- 3. Adequate far-term investment in the RDT&E infrastructure to enhance our RDT&E capabilities, including the modernization and construction of laboratories and test facilities needed to ensure the efficient and effective development of advanced countermeasures against current and emerging CBRN threats. These threats would include traditional military threat agents, non-traditional agents (NTA), toxic industrial compounds and toxic industrial materials (TIC/TIM). This infrastructure investment includes development actions to maintain our human capital.

#### Chapter 5. Balancing Risk

#### External and Internal Uncertainty to the Chemical and Biological Defense Program

Our nation faces a future environment that is growing in uncertainty. The rapid pace of chemical and biological technology development and proliferation through the information age, as well as globalization of technology and expertise has broadened the CBRN threat context that we will increasingly face in the future. Our adversaries are attempting to develop more varied and expanding capabilities in an effort to achieve their clearly articulated intentions "to continue to try to acquire and employ Chemical, Biological, Radiological and Nuclear material in attacks." The nation must prepare for a much broader array of emerging CBRN threats, given the exponential growth in the field of biotechnology, the increasing industrialization in the world, and global access to scientific information on the Internet. These threats will be potentially more sophisticated and more lethal than those we face now, and will probably have the potential to cause significant socioeconomic impacts.

Uncertainty also exists within the CBDP. The CBDP faces the challenge of maintaining infrastructure to keep the facilities and intellectual capital necessary to conduct all the required actions in CBRN training and T&E. Inadequate future production capabilities will challenge the program's ability to meet varying DoD demands. The need to maintain technological superiority will continue to challenges the CBDP to develop and transition technologies in a timely manner into advanced development acquisition programs and to integrate them into a suitable, affordable, and maintainable capability that provides a significant improvement in military utility. The vagaries of the biannual programming process create fiscal uncertainties that could adversely affect the program as a whole. The CBDP has historically been fiscally constrained, which will continue to require tradeoffs within the program and prioritization of investments between commodity areas based upon Warfighter requirements.

#### Risk Guidance

The CBDP must address uncertainty by employing risk management processes and principles designed to manage uncertainties. This will reduce the likelihood of the potential catastrophic effects of surprise as risks dynamically evolve over the next 10 to 15 years. The risk management process will assist the DoD in identifying the optimum course of action necessary to balance risk to achieve near through far-term objectives, goals, and strategic priorities that are associated with valid requirements and reflect DoD priorities necessary to sustain our nation's competitive advantage. To accomplish this, the program must reduce the risk to the future Warfighter by exploiting and fielding technologies and facilitating efforts to create

transformational capabilities for the required operational elements of sense, shape, shield, and sustain. This means that balance within the CBDP may require the purposeful delay of developing and fielding a particular technology that only provides minimal increase in military utility to exploit fully an opportunity to accelerate the development and fielding of capabilities that mitigate the risk of technological surprise. This balance may also require the CBDP to self-impose delays in development and fielding to align S&T in support of advanced development efforts. Any future competition of fiscal priorities with non-DoD federal agencies directly affects funding for the CBDP and potentially dilutes its far-term ability to counter promptly threats emerging from the accelerating explosion of global scientific competency and technological innovation. Finally, reduced resourcing for the CBDP will jeopardize ongoing efforts to develop and employ the comprehensive suite of capabilities required to support both the current and future Warfighter.

For the near- and mid-term, the overarching risk guidance is to hold current operational risk constant, and reduce risk associated with future potentially catastrophic CBRN threats. The near- and mid-term strategic focus is on integrating a capabilities-based approach while considering both requirements and threats. Further, this focus must address and ensure Joint integrated approaches to counter the threat, gather and apply lessons learned from both ongoing operations and all activities within the CBDP associated with developing capabilities, and address challenges post 9/11. That focus must also support DoD transformation, acquisition reform, and strengthen interagency linkages.

The CBDP Enterprise is committed to the reduction of strategic risk for the far-term. The overarching risk guidance for the future is to reduce, minimize, and negate risk associated with future potentially catastrophic CBRN threats and ensure the processes and culture are in place to maintain this standard for the future. This requires the CBDP to increase capabilities to maintain Joint Force readiness and to sustain our nation's competitive advantage over current and emerging threats. The future will require the CBDP to balance investment priorities against risk through periodic review, assessment and decision-making using the program's established organizational processes and methodology. At any time in the future, the program will be required to balance near- and far-term investments with far-term strategic goals and in response to changes in risk.

Failure to invest in the right future CBDP capabilities by improving and integrating across the DOTMLPF domains will increase strategic risk to our nation. The ability of the CBDP to respond to new and emerging threats is critically dependent on continued support of integration and awareness of revolutionary advances in S&T, such as biotechnology and nanotechnology. These implications combine to underscore a strategic national security imperative to place the highest priority on sustaining and further improving DoD's CBDP to include our infrastructure, and ultimately our ability to provide CBRN defense capabilities.

#### Risk Mitigation Strategy

Although the CBDP cannot directly reduce the probability of adversarial use of CBRN weapons, it can employ a risk mitigation strategy to reduce significantly the consequence of a CBRN attack. The DoD is transforming along a continuum to counter the increasing threat from the potential future use of CBRN weapons by our enemies. This change is required, to meet the

challenges of an era of surprise and uncertainty, building a combined threat and capabilities-based force that provides a modular, integrated defense in-depth that are easily upgraded to incorporate emerging technologies and respond to changes in threat. Although, operational tasks that are based on mission needs and operating concepts will continue to drive capability developments (modernization), S&T projects and advanced development programs may need to be accelerated in reaction to changes in the risks posed by the adversarial threats, or decelerated based on unacceptable risks resulting from technological risks. Additionally, the CBDP must remain cognizant of challenges faced by industry to ensure that we maintain the necessary industrial based and surge capability necessary to meet uncertain future challenges. Finally, the CBDP must continue to fully support both national and strategic military strategies in the future and always consider the following factors when balancing risk:

- A continuously evolving strategic threat from state and non-state actors
- The most recent CBRN passive defense capabilities based assessment that should identify DOTMLPF gaps throughout the passive defense mission area
- A possible future of overall declining DoD resources
- An evolving geopolitical environment
- The constant need for innovative technology to support Joint Force modernization

The increasing complexity of modern conflict for the future will demand that CBRN defense capabilities are developed and fielded in the most cost effective and expeditious manner possible. Furthering that complexity, the evolving threat environment calls for both threat and capabilities-based approaches requiring the identification of capabilities that U.S. military forces will need to conduct operations against any threat. The determination of each specific adversary's intentions and capabilities may not be possible, underscoring the need to balance judiciously overall program risk.

#### Chapter 6. Conclusion

To achieve the strategic goals of the CBDP and provide the Warfighter with the best technologies and support, the CBDP Enterprise provides integrated, coordinated, and sustainable CBRN defense material and non-material solutions to the Joint Warfighter. The CBDP is focusing all efforts on achieving the following four strategic goals:

- 1. Provide operational capabilities to the Joint Force to ensure they are prepared to operate successfully within all COCOM area of responsibility in current CBRN threat environments
- 2. Define and develop future capabilities to increase significantly our ability to dissuade, deter, defend against, and defeat any future adversary in any CBRN threat environment
- 3. Sustain the capability of the Joint Force to operate jointly and provide an effective response in any CBRN environment
- 4. Improve management practices to fulfill Enterprise strategic roles and missions, meet the requirements of 50 U.S.C. 1522 and 1523, and ensure effective and efficient use of department resources in accordance with the priorities established in our National Military Strategies

The path for the CBDP is clear—the program will build on current strengths to support the Warfighter in a time of urgent need while recognizing that the environment is constantly changing. It will develop the organizational culture to adapt rapidly to those changes as they occur, while continuously planning to achieve desired future capabilities. This includes program support to passive defense, consequence management, force protection, and homeland defense. CBDP strengths are unique and multi-disciplinary with regard to subject matter expertise and community synergy, and require the integration of diverse specialties and processes.

To ensure that our Soldiers, Marines, Sailors, and Airmen continue to lead the world in CBRN defense capabilities, the CBDP must obtain the necessary DOTMLPF integrated solutions to achieve the mission to provide CBRN defense capabilities in support of the national military strategies and realize the vision to ensure that DoD operations are unconstrained by CBRN effects. The CBDP will continue to develop new defensive capabilities in anticipation of the continued evolution of WMD threats. These capabilities include integrated solutions to the potential threats of genetically engineered biological pathogens and next generation chemical agents. The combined efforts of the CBDP Enterprise have created a Joint Force with Warfighters that are currently better organized, trained, equipped, and resourced than in the past to deal with all aspects of the threat posed by WMD. Achieving the vision and mission of the CBDP will ensure that this remains the case in the future.

# **Appendix A: Chemical and Biological Defense Program Responsibility for Strategic Priorities**

	Office of	Office of	
CBDP Strategic Priority	Primary	Collateral	
obbi strategic inonty	Responsibility	Responsibility	
Support Current Global Operations with	JRO-CBRND	OSA(CBD&CDP) &	
Leading Edge Capabilities	JKO-CDKND	Military Departments	
Ensure Operationally Focused Test &	CBDP T&E	JRO-CBRND, DTRA-	
Evaluation	Executive	JSTO, & JPEO-CBD	
Reinforce Training, Leader Development,	OSA(CBD&CDP)	JRO-CBRND, Joint	
and Education	OSA(CDD&CDI)	Combat Developer for	
and Education		CBRN Defense, &	
		Military Departments	
Execute Acquisition Programs	JPEO-CBD	DTRA-JSTO & Military	
Execute Acquisition 1 Tograms	JI LO CDD	Departments	
Gauge CBRN Defense Preparedness	JRO-CBRND	Military Departments,	
Guage Chart Bereinse Frepareuness	THE CERTIFIE	JPEO-CBD, PAIO, &	
		OSA(CBD&CDP)	
Develop Capabilities to Maintain Military	JRO-CBRND	DTRA-JSTO & JPEO-	
Advantage Against Future Threats	VIII OBILI (B	CBD	
Define Future CBRN Defense Human	JRO-CBRND	Joint Combat Developer	
Capital Skills and Competencies		for CBRN Defense,	
The same of the sa		CBDP T&E Executive, &	
		OSA(CBD&CDP)	
<b>Sponsor Innovative Joint Experimentation</b>	Joint Combat	DTRA-JSTO & JPEO-	
•	Developer for	CBD	
	CBRN Defense		
Maintain Robust S&T Base, Promote and	DTRA-JSTO	JPEO-CBD & Military	
Exploit Scientific Discoveries		Departments	
Upgrade Facilities to Enable DoD	Military	DTRA-JSTO, JPEO-CBD,	
Transformation Goals	Departments	& CBDP T&E Executive	
<b>Streamline Decision Processes and Drive</b>	JPEO-CBD	JRO-CBRND, DTRA-	
Acquisition Excellence		JSTO, & CBDP T&E	
		Executive	
Continuous Process Improvement	OSA(CBD&CDP)	DTRA-JSTO,	
		JRO-CBRND, JPEO-CBD,	
		CBDP T&E Executive, &	
		Military Departments	
Implement Process, Organization, and	OSA(CBD&CDP)	JRO-CBRND DTRA-	
<b>Business Transformation</b>		JSTO, JPEO-CBD,	
		CBDP T&E Executive, &	
		Military Departments	
Perform International Liaison	OSA(CBD&CDP)	DTRA-JSTO & JPEO-	
		CBD	
Perform Interagency Liaison	OSA(CBD&CDP)	DTRA-JSTO & JPEO-	

		CBD	
Implement a Strategic Plan (Enterprise)	OSA(CBD&CDP)	JRO-CBRND, DTRA-	
		JSTO, JPEO-CBD, CBDP	
		T&E Executive, & PAIO	
Implement a Strategic Communication Plan	OSA(CBD&CDP)	JRO-CBRND, DTRA-	
		JSTO, JPEO-CBD, CBDP	
		T&E Executive, & PAIO	

#### **Appendix B: List of Acronyms and Abbreviations**

ATSD(NCB) Assistant to the Secretary of Defense for Nuclear and Chemical and

**Biological Defense Programs** 

CBDP Chemical and Biological Defense Program
CBRN Chemical, Biological, Radiological, and Nuclear

CJCS Chairman, Joint Chiefs of Staff

COCOM Combatant Commander
COTS Commercial off-the-shelf

C-WMD Combating Weapons of Mass Destruction

DAE Defense Acquisition Executive DAU Defense Acquisition University

DoD Department of Defense

DoDD Department of Defense Directive

DOTMLPF Doctrine, Organization, Training, Materiel, Leadership and Education,

Personnel, Facilities

DHS Department of Homeland Security

DHHS Department of Health and Human Services

DLA Defense Logistics Agency

DTRA Defense Threat Reduction Agency

EA Executive Agent

FDA Food and Drug Administration

JCD-CBRND Joint Concept Developer for Experimentation for Chemical, Biological,

Radiological, and Nuclear Defense

JPEO-CBD Joint Program Executive Office for Chemical and Biological Defense Joint Requirements Office for Chemical, Biological, Radiological, and

Nuclear Defense

JSTO-CBD Joint Science and Technology Office for Chemical and Biological Defense

KPP Key Performance Parameter NDS National Defense Strategy

MDAP Major Defense Acquisition Program

MS Milestone

MOU Memorandum of Understanding

NTA Non-Traditional Agents

OASD(HA) Office of the Assistant Secretary of Defense (Health Affairs)

OPR/OCR Office of Primary Responsibility/Office of Collateral Responsibility

OSD Office of the Secretary of Defense OSA Office of the Special Assistant

OUSD(P&R) Office of the Under Secretary of Defense (Personnel and Readiness)

OUSD(P) Office of the Under Secretary of Defense (Policy)

PAIO Program Analysis and Integration Office

POM Program Objective Memorandum
PSG Program Strategy Guidance
QDR Quadrennial Defense Review
R&D Research and Development

RDA Research, Development, and Acquisition

RDT&E Research, Development, Testing and Evaluation

SA (CBD&CDP) Special Assistant (Chemical Biological Defense and Chemical

Demilitarization Program)

S&T Science and Technology

TMTI Transformational Medical Technologies Initiative

TIC/TIM Toxic Industrial Compounds and Toxic Industrial Materials

T&E Test and Evaluation

USACBRNS U.S. Army Chemical, Biological, Radiological, and Nuclear School

U.S.C. United States Code

USD(AT&L) Under Secretary of Defense for Acquisition, Technology and Logistics

USR Unit Status Report

WMD Weapons of Mass Destruction