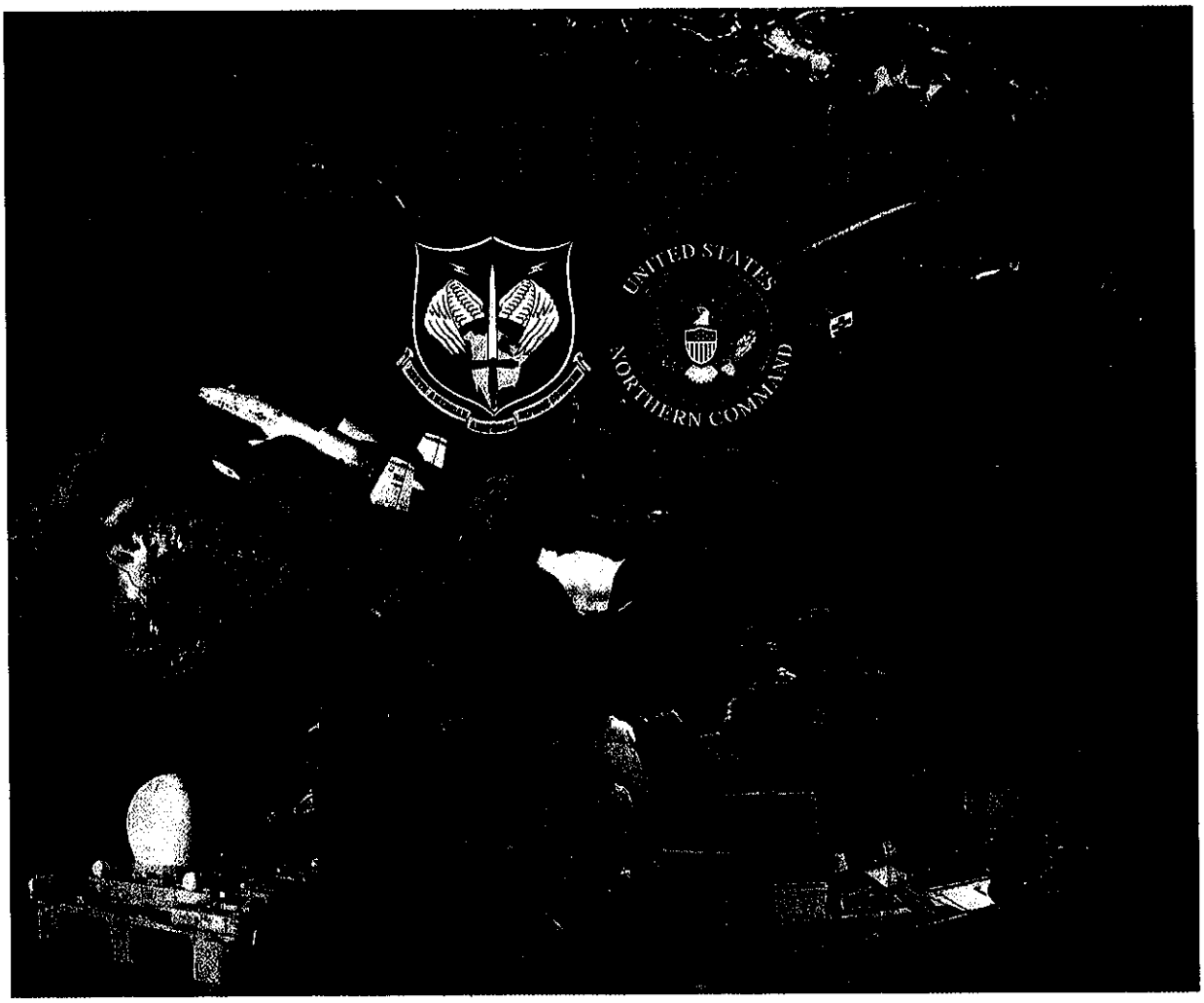
The Homeland Defense and Civil Support Capabilities-Based Assessment (HD/CS CBA)



Study Plan

Version 22 (14 Mar 2008)

Executive Summary

During the April 5, 2007, Deputy's Advisory Working Group (DAWG) meeting, the DepSecDef directed completion of a capability based analysis (CBA) based on the Homeland Defense/Civil Support (HD/CS) Defense Planning Scenarios. The emphasis of this CBA will be on identification of gaps within the HD/CS mission which only DOD can supply. On May 30, 2007, a memo from the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (ASD/HD&ASA) requested the NORAD-USNORTHCOM Commander lead this HD/CS CBA. Finally, the DepSecDef 's August 7, 2007, brief to President of the United States identified the HD/CS CBA as one of DOD's top 25 Transformational Priorities with an objective of advancing to a major milestone by Dec 08. For the HD/CS CBA, submission of the Joint Capabilities Document (JCD) to the JROC for approval is this major milestone.

This Study Plan outlines the background, scope, strategic assumptions, study objectives, analysis methodology, scenario considerations, timeline, and management responsibilities in conducting the Homeland Defense and Civil Support Capabilities-based Assessment (HD/CS CBA) to include production of the Functional Area Analysis (FAA), Functional Needs Analysis (FNA) and a Joint Capabilities Document (JCD). This CBA, through the execution of the FAA, FNA, and JCD; identifies, describes, documents, and prioritizes DOD's capability gaps and excesses in the HD/CS mission areas (to include the Mission Assurance (MA) function).

The objective of this HD/CS CBA is to assess DOD's ability to conduct HD and support CS missions across air, space, maritime, land, and cyber domains while simultaneously achieving MA objectives. While the HD/CS Joint Operating Concept (JOC) is the primary document describing how DOD will operate to achieve national unity of effort, this CBA will assist in identifying, and prioritizing, the capabilities which DOD will provide to defend the homeland and provide support to the lead federal agency for civil support.

The HD/CS CBA focuses on military problems facing DOD in the 2012-2025 timeframe with an emphasis on 2014-2016, i.e., "how" DOD will fulfill its responsibilities required to lead, support and enable HD/CS missions. The HD/CS CBA will leverage previous and ongoing Service, Combatant Command, Agency, and Interagency analytical efforts to the maximum extent possible to prevent duplicative efforts and help define required HD/CS tasks, capabilities, capability gaps, and potential trade space. Significant collaboration with Interagency stakeholders is essential to the success of the CBA.

Finally, this paper puts forward three scenarios for use in the HD/CS CBA analysis. These scenarios provide the conditions against which the HD/CS capabilities will be measured in the CBA and help define the capabilities needed for HD/CS. The scenarios are drawn from the National Planning Scenarios (NPSs), the Defense Planning Scenario (DPS), and the Steady State Security Posture scenarios (SSSPs). In addition, other key Analytic Agenda efforts to include the CS Analytic Baseline (CSAB) and the HD Multi-Service Force Deployment (MSFD) studies will also be considered in the analysis as much as practical to help ensure consistency.

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1. **Purpose.** This Study Plan outlines the background, scope, strategic assumptions, study objectives, analytical methodology, scenario considerations, timeline, and management responsibilities in conducting the Homeland Defense and Civil Support[1] Capabilities-based Assessment (HD/CS CBA) to include production of the Functional Area Analysis (FAA), Functional Needs Analysis (FNA) and a Joint Capabilities Document (JCD). This CBA, through the execution of the FAA, FNA, and JCD; identifies, describes, documents, and prioritizes DOD's capability gaps and excesses in the HD and CS mission areas (to include the Mission Assurance function).

2. **Study Sponsor.** The Commander (CDR), North American Aerospace Defense Command (NORAD) – who is responsible for aerospace warning, aerospace control, and maritime warning of North America, and the CDR, United States Northern Command (USNORTHCOM), who is the Department of Defense (DOD) Combatant Commander charged with conducting HD and CS operations. Because of the commands' mission sets, the commander also actively works to maintain mission assurance. As the organization with the widest operational perspective, NORAD and USNORTHCOM have been assigned responsibility for leading the HD/CS CBA on behalf of the DOD and in partnership with other HD, CS, and Mission Assurance (MA) stakeholders. As study lead, NORAD and USNORTHCOM will establish the necessary analytical organizational structure and solicit the participation of other departments and agencies within the DOD and other government agencies (e.g., Federal, State, local and tribal entities) to conduct a thorough CBA.

   The Deputy Secretary of Defense briefed the President on 7 August 2007 on DOD's Top 25 Transformational Priorities and the HD/CS CBA was one of them. The Secretary set an objective to institutionalize each of these transformation initiatives by either finishing or advancing to a major milestone by December 2008. Furthermore, he directed these Top 25 priorities are to be vetted and briefed to the Deputy's Advisory Working Group (DAWG), the Senior Leaders Review Group (SLRG), and the Defense Senior Leaders Conference (DSLC) as required to ensure adequate oversight and progress. Recently, the Guidance for Deployment of the Force (GDF) tasked NORAD and USNORTHCOM to provide an in-progress review on the HD/CS CBA to the DAWG in July 2008 and brief the final report to the DAWG in February 2009.

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[1] Civil Support is defined as the application of DOD's rapid response and other technical capabilities to domestic emergencies or disasters in support of civil authorities. CS includes, but is not limited to, support to US civil authorities for natural and manmade domestic emergencies, civil disturbances, and authorized law enforcement activities. When this type of support is requested through a formal request process, approved by the President or SecDef, and executed under the guidance our nation's National Response Framework (NRF), the support is characterized as Defense Support of Civil Authorities (DSCA). For the purposes of this CBA, the umbrella term Civil Support is assumed to include the activities, roles, and responsibilities described by the following legacy terms: Civil Support (CS), Defense Support of Civil Authorities (DSCA), Military Assistance to Civil Authorities (MACA), Military Assistance for Civil Disturbance (MACD), and Military Support to Civil Law Enforcement Agencies (MSCLEA). Each of these terms is defined in the glossary of this document.

3. **Objectives.** The HD/CS CBA will assess DOD[2]'s ability to conduct HD and CS missions across air, space, maritime, land, and cyber domains while simultaneously achieving MA objectives. Specifically, NORAD-USNORTHCOM will lead a comprehensive HD/CS CBA to:

   3.1. Establish assumptions, informed by interagency partners, on DOD and interagency roles and responsibilities for HD/CS missions and mission assurance function.[3]
   3.2. Through a cascading mission-to-capability, capability-to-task, task-to-characteristic, characteristic-to-attribute linkage[4], determine the core capabilities required to execute DOD's HD/CS missions and mission assurance functions (CJCSI 3170.01F).
   3.3. Systematically and comprehensively identify, integrate, and assess existing and planned HD, CS, and MA capabilities for the specified timeframe. As a key facet of this determination, in conjunction with Department of Homeland Security (DHS), identify current interagency HD/CS capabilities.
   3.4. Identify and prioritize critical HD, CS, and MA capability gaps, overlaps, and redundancies while considering and characterizing mission risk.
   3.5. Conduct a risk assessment and recommend a prioritized plan for future DOD HD, CS, and MA capability development which effectively leverages interagency investment.
   3.6. Deliver a Joint Capabilities Document (JCD) with a prioritized list of HD, CS, and MA capability gaps.

4. **Background.**

   4.1. The DOD is charged with fighting and winning the nation's wars, a responsibility traditionally executed overseas. However, today the DOD operates in a changing, uncertain security environment facing a range of threats, extending into all domains and the homeland. Whereas the enemies of yesterday were relatively predictable, homogenous, hierarchical, and resistant to change, today's adversaries are unpredictable, diverse, increasingly networked, and dynamic. These adversaries benefit from technologies and materials readily accessible on world markets, to include disruptive systems or the ingredients required to fabricate weapons of mass destruction (WMD). This potential availability of WMD to terrorist groups is of vital concern, especially as terrorists thrive in the "seam" of ambiguity where threats are neither clearly military wartime threats nor clearly criminal type threats. Current trends indicate a future security environment which includes:

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[2] DOD is defined as the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the combatant commands, the Office of the Inspector General of the Department of Defense, the Department of Defense agencies, field activities, and all other organizational entities in the Department of Defense. (JP-1) Per Statute and for the purpose of this study, the DOD includes the National Guard and Coast Guard.

[3] This CBA does not subsume the direction or tasks contained within HSPD-8 for federal, state, local, and tribal capabilities and shortfalls for which the Department of Homeland Security has the lead. Additionally, this CBA does not imply changes to HSPD-5 leadership or actions, nor change Policy for the DOD.

[4] See Figure 4, pg 12 for an example.

4.1.1. Certain nation-states pursuing traditional, but constantly improving, capabilities including manned or unmanned systems (air, ground and maritime), kinetic weapons, ballistic and cruise missiles.

4.1.2. Emerging threats presenting greater challenges through an increased use of asymmetric approaches which avoid US strengths and attack US vulnerabilities in lieu of more traditional military means and methods.

4.1.3. Globalization creating opportunities for economic growth and an impetus for expanding political freedoms, but also accelerating corruption, the spread of disease, WMD technology, extremist ideologies, and terrorism.

4.1.4. Terrorism and terror tactics which are increasingly lethal, unpredictable, credible, well-organized, and well-financed.

4.1.5. Kinetic and non-kinetic attacks on information, Supervisory Control and Data Acquisition (SCADA) and space systems.

4.1.6. Increase in the speed and scale of the proliferation of missile technology and the spread of chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) weapons and their means of delivery, posing a fast-growing challenge to land, maritime, air, cyber, and space capabilities in the homeland and abroad.

4.1.7. Requirements for unified action across DOD, USG Interagency, Inter-Governmental organizations (IGO), non-governmental organization (NGO) and multinational partners.

4.1.8. Reassessment of DOD capabilities in domestic situations, specifically for the use of U.S. Coast Guard in Title 14 status and the National Guard in Title 32 status, within the roles of disaster response and border control support.

4.2. The Homeland is confronted with a wide spectrum of threats ranging from traditional national security threats (ballistic missile attack) to law enforcement threats (drug smuggling). Between the two ends of this spectrum, there is a set of missions where an overlap of roles, responsibilities, authorities and capabilities exist amongst DOD, Department of Homeland Security (DHS), Department Health and Human Services (DHHS), Department of Justice (DOJ), and other Interagency (IA) stakeholders in securing the United States (US). These areas of overlap present an opportunity to take advantage of increased US Government capacity, and should not be viewed as detrimental. In order to take advantage of these areas of overlap, it is vital that appropriate interagency pre-event planning occur and that stakeholders come together in a "unity of effort" through operational coordination and collaboration during the threat response. Noting the importance of this need for "unity of effort," the President has directed specific coordination requirements in the Maritime Operational Threat Response (MOTR) Plan and the Aviation Operational Threat Response (AOTR) Plan, as well in other planning and operational documents. While the HD/CS Joint Operating Concept is the primary document describing how DOD will operate to achieve National unity of effort, this CBA will assist in identifying, and prioritizing the capabilities which DOD will use to contribute to the Nation's security activities.

4.3. In parallel with the Homeland Defense mission, DOD must remain prepared to support its Federal, State, and local partners in responding to natural and manmade disasters or accidents when directed. Natural disasters such as major hurricanes, earthquakes, or

pandemics can overwhelm local responders and involve significant allocation of defense resources to help mitigate the effects and support relief and recovery efforts. Likewise, a successful terrorist attack, particularly one involving WMD, can cause catastrophic losses requiring substantial Defense Support of Civil Authorities (DSCA). DOD must be trained, equipped, and ready to provide the capabilities needed to assist civil authorities when required.

4.4. Finally, DOD must sustain the nation's freedom of action during and despite any of the events described above. This effort includes Emergency Preparedness, Defense Critical Infrastructure Protection, Continuity of Government and Continuity of Operations as well as ensuring and assessing the protection of the Defense Industrial Base.

5. **Scope.** The HD/CS CBA focuses on the following military problem facing DOD in the 2012-2025 timeframe, i.e., "how" DOD will fulfill its responsibilities required to lead, support and enable HD and CS missions across the range of military operations (ROMO).[5] This military problem[6] includes the ability to:

5.1. Anticipate, detect, deter, prevent, and defeat internal/external threats or aggression to the Homeland.
5.2. Respond to and support mitigation of catastrophic incidents as required.
5.3. Integrate and operate with interagency partners to achieve unity of effort and conduct operations to counter threats of, and respond to consequences from, incidents in the United States.
5.4. Plan, prepare, deploy, employ, and sustain the force in order to defend the Homeland, provide CS and maintain mission assurance.
5.5. Guide development of future capabilities within a specific segment of the ROMO that includes HD and CS missions and Mission Assurance planning activities.

6. **Assumptions.** The following strategic assumptions will guide the HD/CS CBA.[7] The Working Groups (WG) may develop additional assumptions required to enable the analytical process.

6.1. The United States will continue to face traditional military challenges from hostile nation-states. Nation-state adversaries and trans-national terrorist groups such as Al-Qaida will incorporate asymmetric threats into their broader strategies of competition and confrontation with the United States.
6.2. Terrorist and sub-national groups will seek, and potentially gain, surreptitious entry into the United States to conduct mass casualty attacks on US soil. As security tightens along the homeland's borders, adversaries may attack from the perimeters using stand-off asymmetric systems such as air and sea-based cruise missiles or sea-based ballistic missiles with the goal of causing mass casualties on US soil.
6.3. Homeland Defense will continue to be a priority of the DOD.

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[5] As defined by the Homeland Defense and Civil Support Joint Operating Concept
[6] As documented in the Homeland Defense and Civil Support Joint Operating Concept
[7] Drawn from the family of Joint Integrating Concepts, Joint Functional Concepts, Joint Operating Concepts, and The Strategy for Homeland Defense and Civil Support.

6.4. An incident severe enough to trigger a Civil Support response may occur with little to no warning and involve mass casualties, displacement of large numbers of citizens and large scale critical infrastructure destruction where local, tribal, state and other Federal agencies are overwhelmed.

6.5. DOD will plan to respond to multiple, near simultaneous, incidents. If directed and in partnership with other US Government agencies, DOD will surge to provide capabilities in support of domestic consequence management for all hazard catastrophic events and, if needed, simultaneously raise the level of defense preparedness in all domains (air, space, land, maritime, and cyberspace).

6.6. DOD will provide a total force (combined active and reserve component) response to support civil authorities for domestic emergencies and other activities, as directed. Most scenarios that require a Federal response will require significant National Guard involvement. National Guard units, in many cases, will be the first military forces to respond to an incident and can be designated for law enforcement activities.

6.7. DOD will continue to support efforts to improve capabilities of our domestic and international partners in the execution of missions supporting security of the homeland and disaster response. This may include sharing DOD expertise and transferring DOD technology to build partnership capabilities with the goal of enabling responsible civilian agencies to cope with non-catastrophic domestic incidents independent of DOD support. Full attainment of this goal is assumed to lie beyond the timeframe of this analysis.

6.8. The HD/CS CBA will maintain the following perspective on the issue of DOD civil support material and equipment procurement -- "DOD may procure and maintain supplies, materiel, and equipment as necessary and appropriate to accomplish the civil support mission."[8]

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[8] While counter to existing formal guidance, there are several compelling reasons for maintaining this perspective:
1) Study is being conducted on behalf of entire DOD and therefore, the SECDEF. It is therefore appropriate to provide a recommendation on equipment purchases, if the results of the study support such a recommendation.
2) DOD is already providing dedicated civil support equipment in the areas of Consequence Management.
3) The HD/CS CBA's analytical approach requires the most stressing set of requirements possible for the analysis (thereby maximizing the value of the results). The CBA is not dictating likelihood or appropriateness of buying equipment for DSCA; rather, we are recognizing that such an event is possible and becomes the most most-stressing environment.
4) This policy is current under review. The *Memorandum on Defense Department Programming and Budgeting for Defense Support of Civil Authorities* [currently in DRAFT and released for comment in December 2007 by OSD(P)] highlights the recommendations of the Commission on the National Guard and Reserves' that DOD revise its current policy. Furthermore, the memo proposes the following language (from the SECDEF to the Service Departments), "Therefore, I am directing all Department components, consistent with the law, national policy, and their assigned missions, to plan, program, and budget to enhance their ability to provide support to civil authorities. All Department components will also eliminate from their policies, directives, instructions, and plans any language that would prohibit such planning, programming, or budgeting."
5) The FY 2008 National Defense Authorization Act, Section 1814, requires the SecDef, in consultation with the Secretary of DHS, to identify the training and equipment needed for both National guard personnel and members of the Armed Forces on active duty to provide military assistance to civil authorities and for other domestic operation to respond to hazards outlined in the National Planning Scenarios to include nuclear detonation, biological attack, biological disease outbreak/pandemic flu, the plague, chemical attack-blister agent, chemical attack-toxic industrial chemicals, chemical attack-nerve agent, chemical attack-chlorine tank explosion, major hurricane, major earthquake, radiological attack-radiological dispersal device, explosives attack-bombing using improvised explosive device, biological attack food contamination, biological attack-foreign animal disease and cyber attack.

6.9. Allies and friendly nations will cooperate with the United States in mutually beneficial security cooperation arrangements. The US will act with other nations to provide a multi-national approach to defeating shared threats. However, the US will maintain a unilateral capability to protect vital national interests.

7. **Methodology.** The HD/CS CBA will leverage previous and ongoing Service, Combatant Command, Agency, and Interagency analytical efforts to help define required HD/CS tasks, capabilities, capability gaps, and potential trade space.

7.1. Timeframe. The HD/CS CBA scenario timeframe is 2012-2025 with an emphasis on 2014-2016.

7.2. Scenarios. The CBA will leverage the Defense Planning Scenarios (DPS), the National Planning Scenarios (NPS), and the Steady-State Security Postures (SSSPs) to the maximum extent possible. Because of the depth and breadth of the study scope, no single scenario provides the necessary plausibility and stressing functions across each of the working group areas. Therefore, the HD/CS CBA will use a collection of scenarios to provide the necessary analytical context. Working Group leads will ensure the tiered response outlined in the DOD Strategy for HD and CS is considered in all scenarios.

7.2.1. The goals of the scenario development effort include:

7.2.1.1. Address steady-state and surge requirements via threat and environmental stressors across the continuum of Homeland Defense - Civil Support.

7.2.1.2. Collectively stress all four domains (Air & Space, Land, Maritime, and Cyber) and the Mission Assurance function.

7.2.1.3. Base the scenarios on existing, approved NPS and DPS [specifically the Complementary Homeland Defense Scenarios (CHDS) and SSSP] ensuring both validity and plausibility of scenarios.

7.2.1.4. Use the existing NPS/CHDS/SSSP vignettes as building blocks to postulate near-simultaneous events and overlaps between vignettes.

7.2.1.5. Build dual-use scenarios for use in other efforts, such as Analytic Agenda's Homeland Defense Multi-Service Force Deployment effort and the interagency effort to develop a National Homeland Security Plan (NHSP).

7.2.2. The following NPS, CHDS, and SSSP will be used in the HD/CS CBA to provide conditions and operating environment/threat context to the analysis. Specific application and categorization of the scenarios will be developed and presented to the Senior Steering Board for approval.

7.2.2.1. NPS #1 – 10KT Nuclear Detonation

7.2.2.2. NPS # 2 – Biological Attack

7.2.2.3. NPS #9 – Major Earthquake

7.2.2.4. NPS #11 – Radiological Dispersal Device

7.2.2.5. NPS #15 – Cyber Attack
7.2.2.6. CHDS #1 – Nuclear-Armed ICBM
7.2.2.7. CHDS #2 – Nuclear-Armed SLBM
7.2.2.8. CHDS #3 – SLCM w/Non-contagious Biological Attack Payload
7.2.2.9. CHDS #4 – Vehicle-borne Improvised Explosive Device (IED) in Port
7.2.2.10. CHDS #5 – Non-contagious Biological Agent Air-Delivered from Friendly Country
7.2.2.11. SSSP #4-02 – Hurricane Preparation (Civil Support)
7.2.2.12. SSSP #4-04 – Maritime Domain (Homeland Defense)
7.2.2.13. SSSP #4-05 – Cyber Domain (Homeland Defense)
7.2.2.14. SSSP #4-06 – Air Domain (Homeland Defense)
7.2.2.15. SSSP #4-07 – Land Domain (Homeland Defense)
7.2.2.16. SSSP #4-08 – National Special Security Event
7.2.2.17. SSSP #4-11 – Humanitarian Assistance #1
7.2.2.18. SSSP #4-12 – Humanitarian Assistance #2

An expanded discussion of the scenarios chosen, and their application to the HD/CS CBA can be found in Appendix D.

7.3. Study Construct. In general terms, the CBA will examine two missions (Homeland Defense and Civil Support) and one function (Mission Assurance). Six working groups (Air & Space, Maritime, HD Land, DSCA, Cyber, and Mission Assurance) will provide the CBA analysis. Figure 1, below, illustrates the relationships between the working groups and the missions/functions of the HD & CS CBA.

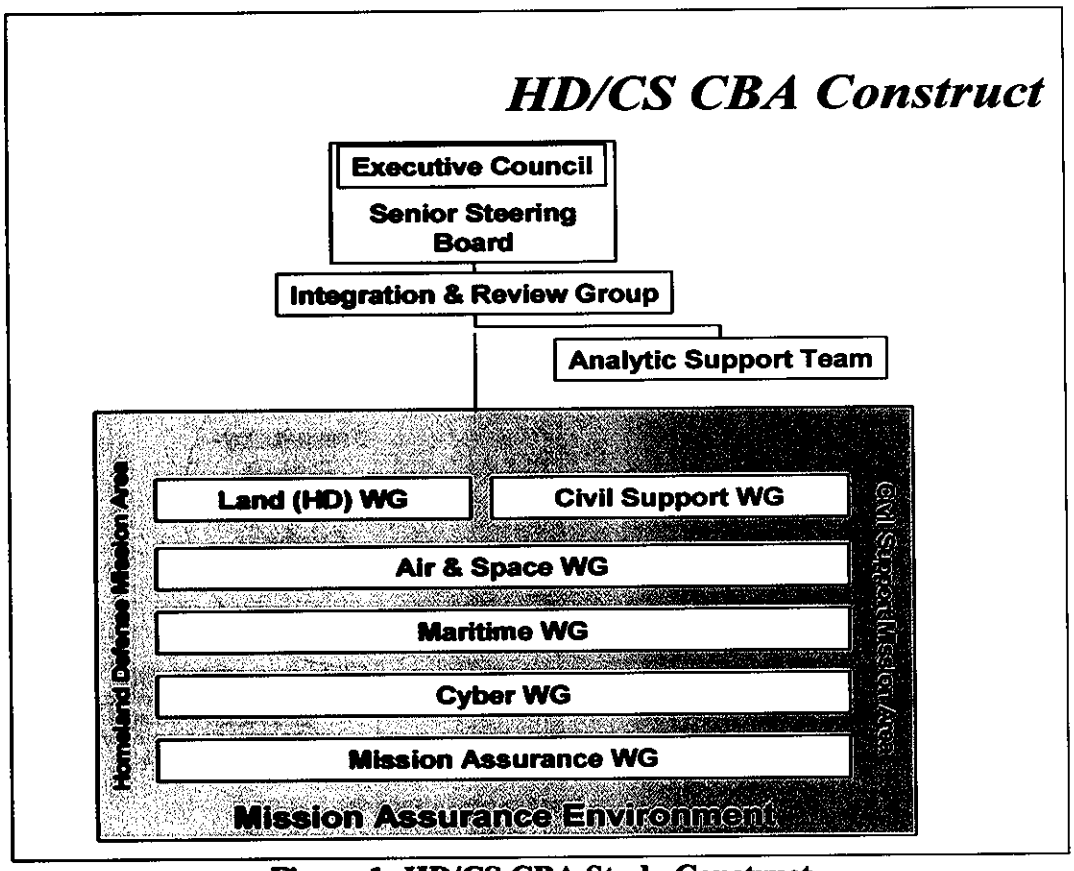

Figure 1: HD/CS CBA Study Construct

7.4 The Analytical Approach. The HD/CS CBA analytical approach uses a combination of techniques to generate data and determine areas of capability gaps and excesses. While a full discourse on the analytical techniques and their methodologies are beyond this work, the three main approaches are briefly discussed below.

Logistics Regression Analysis (LRA). LRA is a statistical technique that builds a distribution-based mathematical model for each task. The model allows for the identification of relative[9] performance level as well as derived objective and threshold levels of performance. The LRA approach is a mature technique that is derived from the financial services, insurance, and behavior psychology industries and has been used extensively in DOD applications. The LRA methodology provides the baseline analysis for the HD/CS CBA.

Preponderance of Evidence (PoE) Analysis. The POE analysis creates a frequency distribution model for known performance issues based off an extensive literature review. It is used to provide a contrasting set of data from the LRA analysis.

[9] To perform analysis in absolute terms requires either a significant amount of historical or test data on each task/capability or a robust modeling and simulation tool for each task/capability. Neither of these approaches is available to the HD/CS CBA.

Subject Matter Expert Inputs. SME inputs are used to provide context and amplifying information to the results of the LRA and PoE analysis. The SME inputs are used as key reference material at several points along the analytical process.

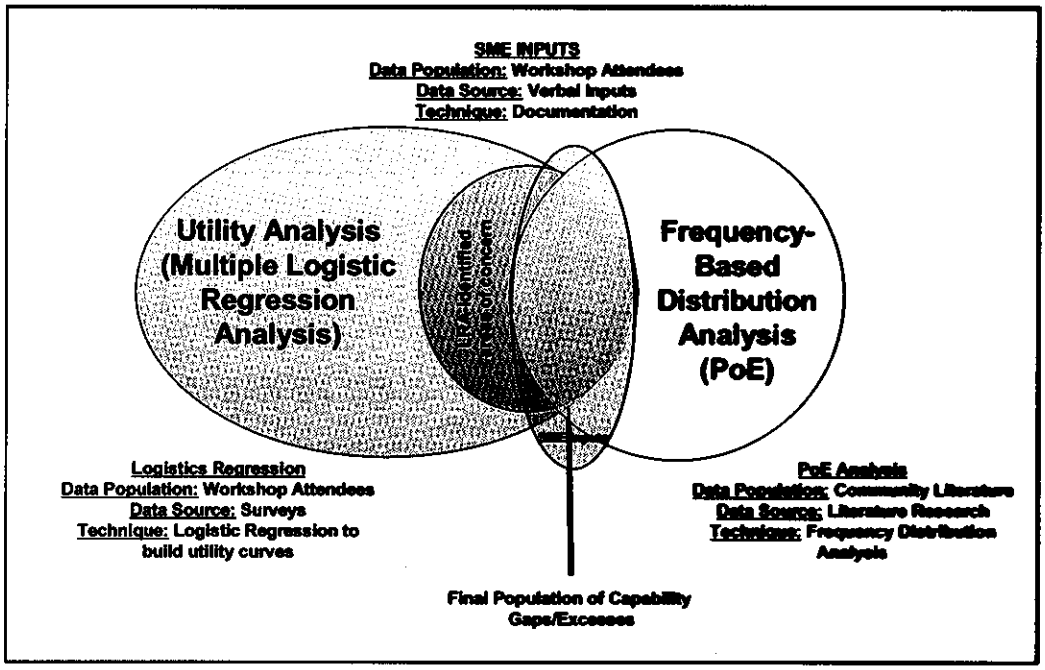

Figure 2: The HD/CS CBA Analytical Techniques

These three techniques will be used to identify, describe, and document capability gaps and excesses. Additional efforts will focus on identifying cause and effect relationships that lead to capability gaps and excesses. Figure 2, on page 9 illustrates how the three techniques intersect.

The LRA approach is the baseline effort, identifying the tasks that show performance concerns. The robustness of this approach also allows for the identification of relative impact each task has on the overall capability and makes investment recommendations easier. The PoE analysis provides a contrasting view of known capability gaps, offering the opportunity for comparison to the LRA results. SME inputs provide context and richness to the results of the LRA and POE analysis by helping describe the capability gap/excess and identify its cause/effect. Additionally, other analytical tools (such as N-NC/J84's Maritime Homeland Defense Model) and other analytical efforts can be leveraged to provide additional results.

7.4.1 CONOPS for Homeland Defense and Civil Support. Due to the scope and scale of the HD/CS CBA, the study team will not be able to rely on a single CONOPS document to provide the operational structure to the analysis. Rather, the working groups will use a variety of CONOPS-like materials to frame the discussion. Examples of CONOPS-like materials include the HD & CS JOC, NORAD operational documents, USNORTHCOM

Concept Plans (CONPLANS), the National Response Framework and Preparedness guidelines, etc.

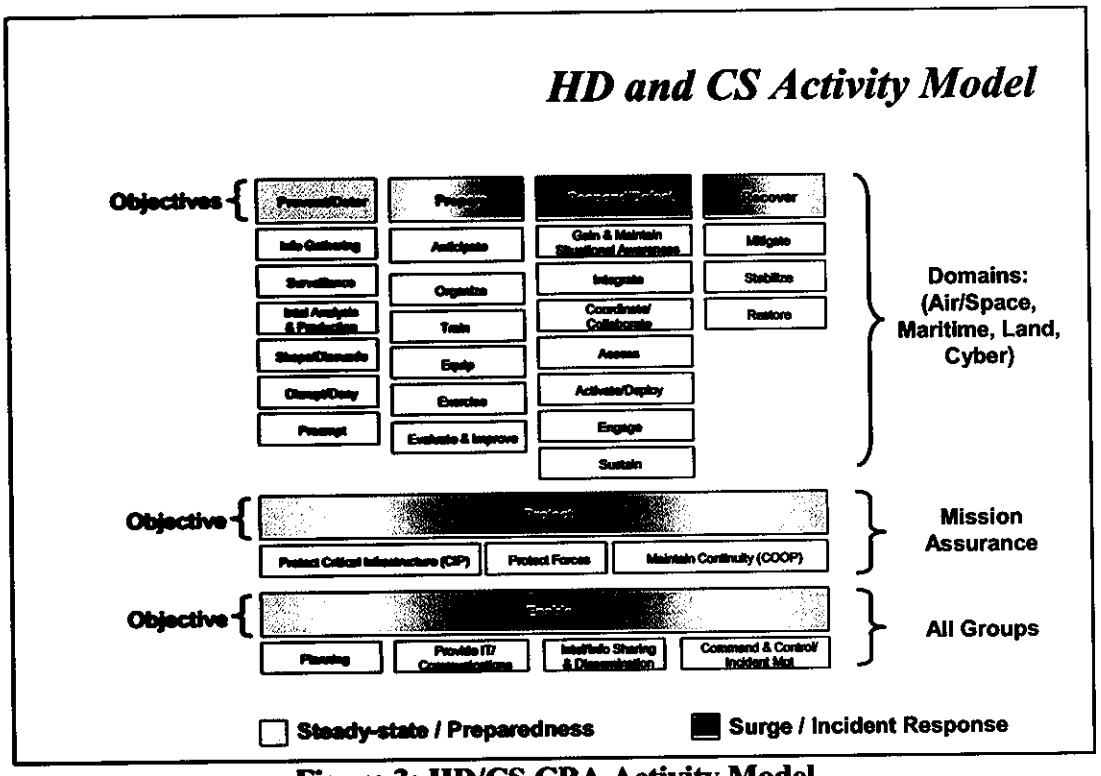

Figure 3: HD/CS CBA Activity Model

7.4.2 The HD/CS Capability Activity Model. The HD/CS CBA study construct will examine the HD and CS mission areas within the organizing framework of an expanded capability model (See Figure 3). This capability model was developed from multiple sources of strategic guidance.[10] The model enables an analysis of critical aspects of operational processes and systems. This model shows the relationships between capabilities and tasks as they are executed with a sense of time, as the chronology moves forward from left to right. This enables added analysis that identifies the interdependencies of capabilities. The Blue areas are steady-state efforts; the Red areas represent surge activities.

7.4.3 Operational Architectures and the Relationship Model. The HD/CS CBA is developing two tools to help illustrate and document the relationships between capabilities, tasks, and other key elements of the analysis. The two products include an operational architecture and a Mission – Capability – Task Relationship (MCTR) Model.

7.4.3.1 The Operational Architecture. The HD/CS CBA will continue developing and maturing the existing Homeland Defense Integrated Operations (HDIO) architecture. This architecture is currently built in the Rationale Rose suite of software and has supported legacy air and missile defense, and maritime defense analysis at USNORTHCOM. The HD/CS CBA will use Rational Rose as an enabling tool to develop DOD Architecture

[10] UCP, NSS, NMS, Strategy for HD/CS, HD/CS JOC, NPF, NIM, OPLANS, CONPLANS, CONOPS

Framework (DODAF) compliant OV-5 and OV-6C products per JCIDS. The HD/CS CBA Team will expand the validated HDIO architecture to include the Civil Support mission area, the Mission Assurance function, as well as the Land, and Cyber domains. The HDIO architecture product includes a 2-D animation capability that supports chronological analysis of a mission, capability, or task.

7.4.3.2 The MCTR Model. The MCTR Model is a visual representation of the relative contributions of each task to a capability and each capability to mission. The MCTR is derived from the statistical analysis performed by the MLR technique. It is useful for visually identifying the highest impact activities among a population of activities. An example MCTR Model is shown in Figure 4 below:

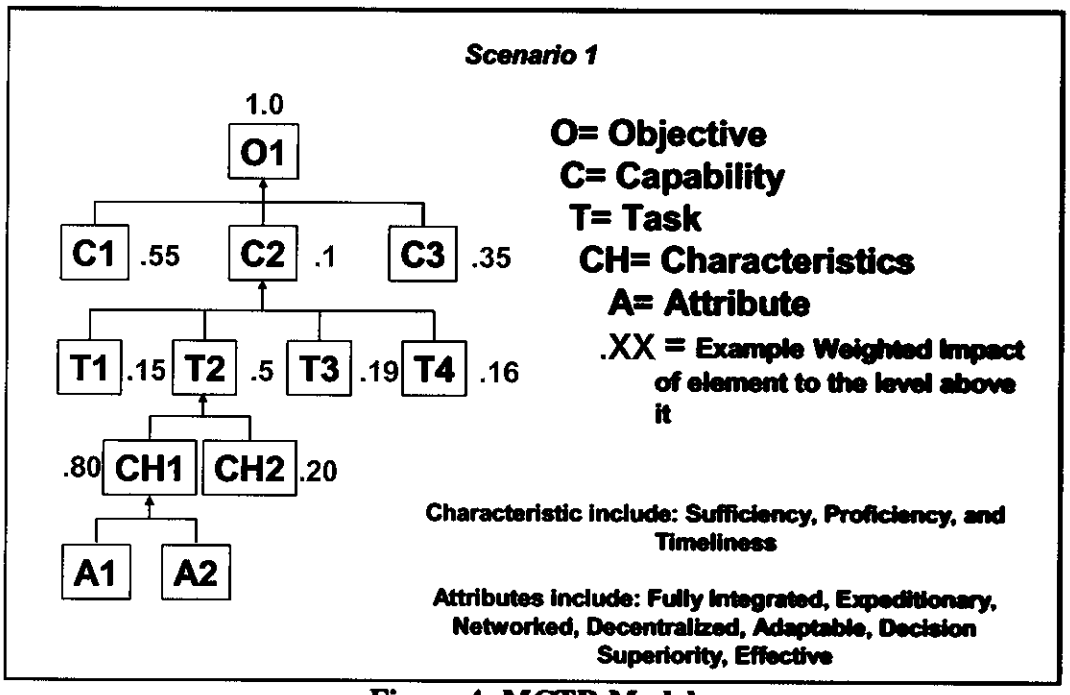

Figure 4: MCTR Model

7.4.4 HD/CS CBA Relationship to Other Analytical Efforts. Throughout the FAA, the HD/CS CBA Team will investigate other completed and on-going analytical efforts. The Working Groups will document their assessment of the applicability of these other efforts considering the activities investigated, the conditions set (scenarios chosen), and the analytical techniques The HD/CS CBA Team will characterize the applicability of these other efforts as follows:

Inclusionary: The work stands-alone. The HD/CS CBA will not examine similar tasks as this work adequately documents HD/CS-related capability gaps and excesses in precise and thorough manner.

Reference: The HD/CS CBA accepts the results of the analytical efforts but will perform additional analysis on the subject either to provide additional data,

expand the task list, address follow-on questions, or to ensure the results are consistent with all HD/CS CBA conditions.

Comparison: HD/CS CBA efforts will overlap the existing analytical effort in an attempt to generate another perspective on the activity. This happens when the WG has questions about the analytical technique, about bias of results, or if the HD/CS aspects of the area could benefit from additional analysis.

The Working Groups will document their position with respect to other analytical events during the FAA and publish the result in the FAA document.

On a related note, the HD/CS CBA Team is working to complement the HD & CS Multi-Force Source Document (MSFD), which begins in February 2008. The HD/CS CBA team and NORAD-USNORTHCOM/J84 (who is heavily involved in the MSFD) have worked with the Joint Staff J8 to develop a common set of basic scenarios that will be applied to both efforts.

8. **Study Issues and Essential Elements of Analysis.** The following Study Issues and Essential Elements of Analysis (EEA) represent the key questions the HD/CS CBA will answer.

   8.1. Study Issue 1: What critical capabilities must future Joint Forces possess to successfully execute the **Homeland Defense** mission?
      8.1.1. EEA 1.1: What multi-domain[11] Homeland Defense tasks[12], with associated standards and conditions, are needed to achieve Homeland Defense missions, objectives, and effects?
      8.1.2. EEA 1.1.1: What are the key attributes of the Homeland Defense tasks?

   8.2. Study Issue 2: What critical capabilities must future Joint Forces possess to successfully execute the **Civil Support** mission?
      8.2.1. EEA 2.1: What multi-domain Civil Support tasks, with associated standards and conditions, are needed to achieve Civil Support missions, objectives, and effects?
      8.2.2. EEA 2.1.1: What are the key attributes of the Civil Support tasks?

   8.3. Study Issue 3: What critical capabilities must future Joint Forces possess to successfully meet **Mission Assurance** objectives?
      8.3.1. EEA 3.1: What Mission Assurance tasks, with associated standards and conditions, are needed to achieve Mission Assurance missions, objectives, and effects?
      8.3.2. EEA 3.1.1: What are the key attributes identified for Mission Assurance tasks?

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[11] Includes Air, Space, Land, Maritime, and Cyber domains.

[12] The term "tasks" may include strategic, operational, and tactical tasks as necessary for execution of the analytical process. Actual tasks considered will be documented in the FAA.

8.4. Study Issue 4: What are the current and/or programmed Department of Defense and interagency resources (e.g., personnel, platforms, systems, programs, processes) for the Homeland Defense/Civil Support missions, and Mission Assurance function?

8.4.1. EEA 4.1: What are the current/programmed Air Force (Active/Reserve/National Guard) resources?

8.4.2. EEA 4.2: What are the current/programmed Army (Active/Reserve/National Guard) resources?

8.4.3. EEA 4.3: What are the current/programmed Marine Corps (Active/Reserve) resources?

8.4.4. EEA 4.4: What are the current/programmed Navy (Active/Reserve) resources?

8.4.5. EEA 4.5: What are the current/programmed US Coast Guard (Active/Reserve) resources?

8.4.6. EEA 4.6: What are the current/programmed Intelligence Community resources in areas of overlapping roles, responsibilities, authorities and capabilities for securing the homeland and responding to the consequences of an incident?

8.4.7. EEA 4.7: What are the current/programmed Interagency resources?

8.4.8. EEA 4.8: What are the current/programmed combatant command resources?

8.4.9. EEA 4.9: What are the current/programmed Combat Service Agency resources?

8.5. Study Issue 5: What is the ability of current DOD resources to provide the required Homeland Defense capabilities?

8.5.1. EEA 5.1: What are the DOD's Homeland Defense operational capability gaps, and excesses in broad effects-based terms accounting for identified overlapping interagency roles, responsibilities, authorities and current/programmed capabilities for securing the homeland?

8.5.2. EEA 5.2: What are the operational risks associated with the Homeland Defense gaps or excess overages?

8.5.3. EEA 5.2.1: What are the metrics (e.g., time, bandwidth, etc.) associated with each capability gap, or overages?

8.5.4. EEA 5.3: What is the relative priority of each Homeland Defense capability gap or shortfall?

8.5.5. EEA 5.4: To what Joint Capability Area (JCA) does each capability gap/shortfall align?

8.6. Study Issue 6: What is the ability of current DOD resources to provide the required Civil Support capabilities?

8.6.1. EEA 6.1: What are the DOD's operational capability gaps, shortfalls, and excess overages accounting for identified overlapping interagency roles, responsibilities, authorities and current/programmed capabilities for responding to incidents in the United States?

8.6.2. EEA 6.2: What are the operational risks associated with the Civil Support gaps or excess overages?

8.6.3. EEA 6.2.1: What are the metrics (e.g., time, bandwidth, etc.) associated with each capability gap or excess overage?

8.6.4. EEA 6.3: What is the relative priority of each Civil Support capability gap or shortfall?

8.6.5. EEA 6.4: To what Joint Capability Area does each capability gap/shortfall align?

8.7. Study Issue 7: Are current DOD resources aligned and managed to provide the required Mission Assurance capability?

8.7.1. EEA 7.1: What are the DOD's Mission Assurance operational capability gaps, shortfalls and excess overages?

8.7.2. EEA 7.2: What are the operational risks associated with the Mission Assurance gaps or excess overages?

8.7.3. EEA 7.2.1: What are the metrics (e.g., time, bandwidth, etc.) associated with each capability gap or excess overage?

8.7.4. EEA 7.3: What is the relative priority of each Mission Assurance capability gap or shortfall?

8.7.5. EEA 7.4: To what Joint Capability Area does each capability gap/shortfall align?

9. **Phasing and deliverables.** The HD/CS CBA is composed of four distinct phases each with specific deliverables. Figure 5, below, illustrates the overall timeline for the HD/CS CBA.

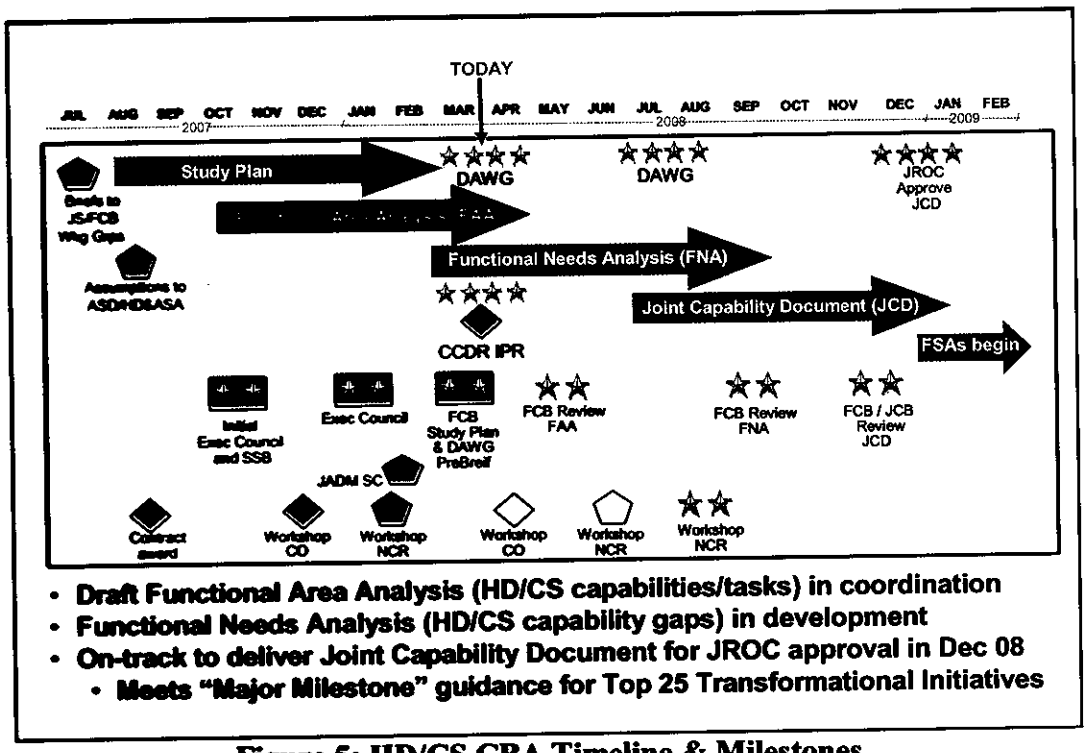

Figure 5: HD/CS CBA Timeline & Milestones

9.1. Phase 1: Study Plan. The initial phase of this CBA will focus on developing a study plan which includes the necessary organization, assumptions, and common reference points needed to manage the HD/CS CBA effort across multiple working groups. Key aspects include developing assumptions defining interagency roles and capabilities, determining projected levels of effort from the organizations potentially contributing to

HD and CS, and defining an overarching operational construct to include a concept for integrating interagency.

9.1.1. The following key actions will be accomplished in Phase 1:
9.1.1.1. Define organizing constructs.
9.1.1.2. Develop planning assumptions for the effort.
9.1.1.3. Development and staffing of the HD & CS CBA Study Plan.

9.1.2. The following deliverables will be produced in Phase 1:
9.1.2.1. HD/CS CBA Study Plan.
9.1.2.2. Working Group Quick Look Briefings.
9.1.2.3. Key study issues and essential elements of analysis representing the key questions the HD/CS CBA will answer

9.2. Phase 2 – Functional Area Analysis (FAA). An FAA states the military problem or mission area to be studied. The FAA will provide a list of tasks the DOD can be expected to conduct in the 2012-2025 (emphasis on 2014-2016) timeframe to achieve the military objectives within the Homeland Defense and Civil Support mission and the Mission Assurance function. Each task defined in the FAA will have associated key measures of effectiveness (MOE) critical to successful accomplishment of the task to the specified standards under the anticipated conditions. The six working groups will begin respective FAAs with a review of all relevant documents to determine the tasks critical to providing the desired effects necessary to achieve the military objectives. The working groups will use the assumptions developed in the Study Plan as the basis for interagency roles and contributions as well as to help identify excess overlaps in capabilities and interdependencies. Active participation of the relevant interagency mission partners is critical to the success of this phase. After the working groups' FAAs are complete, the Integration and Review Group (IRG) will integrate and synthesize all FAAs as part of a comprehensive HD/CS FAA which will be staffed through the Joint Capabilities Integration and Development System (JCIDS) process. The FAA will then be used as a part of the Joint Capabilities Document.

9.2.1. The following key efforts will be accomplished in Phase 2:
9.2.1.1. Define the military problem and the concept to be examined.
9.2.1.2. Identify HD/CS CBA Scenarios (providing conditions).
9.2.1.3. Identify key sources of interagency strategic guidance, Concept of Operation (CONOPS), and other useful documents and conduct literature review of all strategic guidance and mission-centric documents. Interagency roles, responsibilities, authorities and current/programmed capabilities must be accounted for throughout the FAA.
9.2.1.4. Identify and assess existing analytical efforts IAW paragraph 7.4.4 to:
9.2.1.4.1. Determine which areas have already been adequately studied and leverage results from those studies to advocate for HD/CS capability needs in the Fiscal Year (FY) 10-15 POM.

9.2.1.4.2. Identify areas which could benefit from new or additional analysis

9.2.1.5. Identify key capabilities and specified/implied tasks for Homeland Defense/Civil Support missions and Mission Assurance function.

9.2.1.6. Develop Mission – Capabilities – Tasks – Characteristics – Attributes linkage.

9.2.1.7. Refinement, validation, and socialization of Tasks, Scenarios, and performance standards through the execution of collaborative workshop or tabletop exercise (TTX) event(s).

9.2.1.8. Staffing of FAA deliverables IAW JCIDS processes.

9.2.2. The following deliverables will be produced in Phase 2:

9.2.2.1. Submission and approval of analytical scenarios.

9.2.2.2. Results of workshops or tabletop exercises.

9.2.2.3. WG FAA products which provide a list of the following tasks, standards, and conditions.

9.2.2.4. Integrated HD/CS FAA document combining all WG products into a comprehensive FAA document for staffing and approval.

9.3. Phase 3 – Functional Needs Analysis (FNA). Once each working group has completed their respective FAA, they will initiate an FNA. FNAs assess the ability of current and programmed capabilities to accomplish the FAA's identified tasks to uncover capability gaps and redundancies. Using the capabilities, tasks, conditions, scenarios, and standards identified in the FAA as primary input, the FNA will assess the ability of the current and programmed warfighting systems to successfully deliver the needed capabilities under the full range of operating conditions and to the designated standards. The FNA will assess the entire range of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) and policy. The FNA produces a prioritized list of capability gaps that require solutions and indicates the time frame in which those solutions are needed. It may also identify excess overlaps in capabilities that reflect inefficiencies. The FNA results are simply an assessment of how well DOD can do something and accounting of the reasons why DOD cannot achieve mission success at an acceptable level of risk. The resultant capability needs have to be tempered by rough feasibility, cost, and schedule estimates. They should be stated in solution-agnostic terms. The FNA also further defines and refines the integrated architectures. At the completion of each working group FNA, the Integration and Review Group (IRG) will integrate and synthesize all FNAs as part of a single HD/CS FNA. The FNA results will then be combined with the FAA product to build an integrated JCD.

9.3.1. The following key efforts will be accomplished in Phase 3:

9.3.1.1. Review/Refinement of FAA products (Scenarios, Capabilities-Tasks, and Standards) and the reinforcement of requirement to account for the interagency roles, responsibilities, authorities and current/programmed capabilities throughout the FNA.

9.3.1.2. Use of multi-attribute analysis, exercise, existing analysis, and other techniques to identify areas of capability gaps

9.3.1.3. Consideration of known gaps in FNA identification and characterization of gaps

9.3.1.4. Refinement, validation, and socialization of capability gaps through the execution of collaborative "Red Team" seminar event

9.3.2. The following deliverables will be produced in Phase 3:

9.3.2.1. WG FNA products which provide a prioritized list of capability gaps/redundancies/excessive overages for each study area.

9.3.2.2. An integrated HD/CS FAA document combining all WG products into a comprehensive FNA document with a prioritized list of HD/CS capability gaps/redundancies/excesses for staffing and approval.

9.4. Phase 4 – Joint Capabilities Document. The fourth phase of the CBA is the development of a Joint Capabilities Document (JCD) which documents the results and processes of the FAA and FNA into a single document to provide an integrated HD and CS architecture, identify and prioritize capability needs, and recommends development of any needed follow-on Functional Solutions Analyses (FSAs). The HD/CS CBA Team may begin drafting the JCD when the Working Group's FAA and FNA analysis reaches sufficient maturity to initiate the integration process. Under the guidance of the IRG, the HD/CS CBA Team will coordinate JCD briefings to the Executive Council and Senior Steering Board (SSB), as needed, and staff the JCD through JCIDS process for approval.

9.4.1. The following key efforts will be accomplished in Phase 4:

9.4.1.1. Consideration of capability gap dependency and planned investments

9.4.1.2. Developing recommendations for HD Capability Gaps

9.4.1.3. Developing recommendations for CS Capability Gaps

9.4.1.4. Developing recommendations for MA Capability Gaps

9.4.1.5. Drafting of HD/CS JCD.

9.4.1.6. Staffing of JCD products

9.4.2. The following deliverables will be produced in Phase 4:

9.4.2.1. A single integrated, comprehensive Homeland Defense and Civil Support JCD

9.4.2.2. A Homeland Defense and Civil Support integrated architecture.

10. **Organization.** The HD/CS CBA Study Team includes the following elements (figure 6):

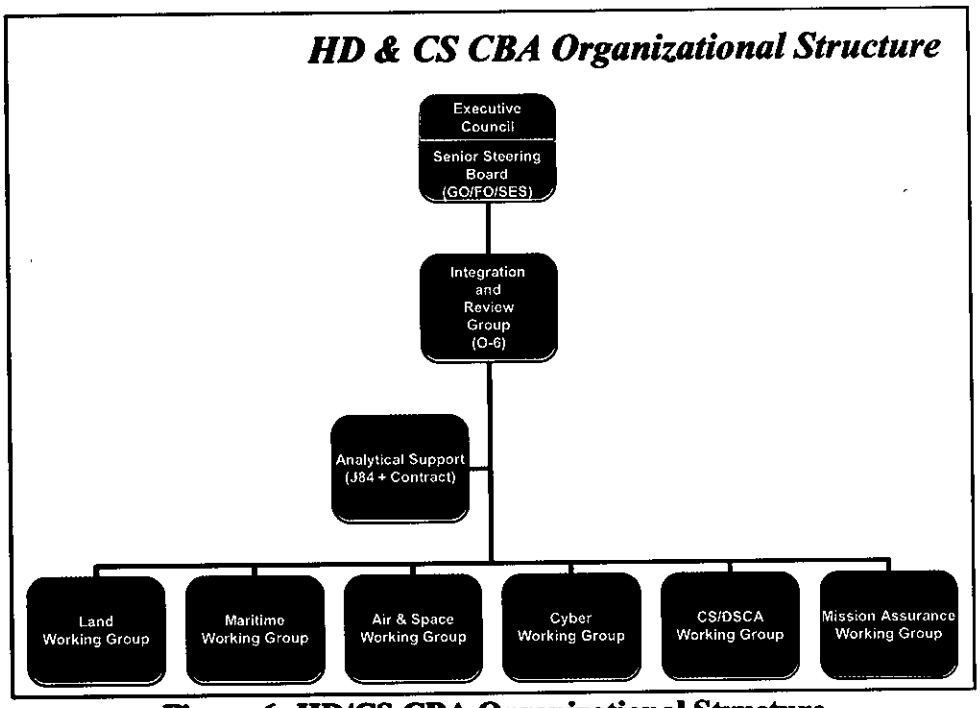

Figure 6: HD/CS CBA Organizational Structure

10.1. Executive Council:

10.1.1. Chair: Mr. Charles Carpenter, Director, Programs, Resources and Analysis, N-NC/J8

10.1.2. Members: Dr. Bucci, (ASD (HD&ASA)); Ms. Disbrow (JS-J8/DDFM); Mr. Troyano (OSD/AT&L); Mr. Bexfield (OSD/PA&E); Maj Gen New (JS-J8/DDFP); RDLM Lloyd (DHS); Maj Gen Rew (AF/A5); Mr. Bechtel (HQ DA/G35); Ms. Beall (OPNAV/N816); Brig Gen Fick (NGB/J8)

10.1.3. Functions:

10.1.3.1. Provides direction and guidance for the overall HD/CS CBA effort

10.1.3.2. Approves CBA products for JCIDS staffing.

10.2. Senior Steering Board (SSB) – provides Senior Leadership guidance.

10.2.1. Chair: N-NC/J8

10.2.2. Members (Executive Council members also serve on SSB): two-star representatives from HSC, OSD(P&R), MDA, DTRA, JS/J2, JS/J3, JS/J5, JS/J6, USSTRATCOM, USPACOM, USSOUTHCOM, USJFCOM, USSOCOM, USTRANSCOM, DHHS, DOJ, DOS, DOT, DOE, USDA, ODNI, EPA, and NASA.

10.2.3. Functions: Provide insight and guidance as well as ensuring collaboration with our partners across the interagency.

10.3. Integration and Review Group (IRG).

10.3.1. Chair: Mr. Reeves (N-NC/J8C Division Chief); Deputy: Mr. Bill Mathis (N-NC/J8C).

10.3.2. Members: O-6 level representatives from each organization on Executive Council, WG Team leads.

10.3.3. Function: supports Executive Council and Senior Steering Board, provides guidance to the HD/CS CBA Team to:

10.3.3.1. Provide updates and briefs to Senior Leadership and the Community of Interest as needed.

10.3.3.2. Provide guidance to, and integration of, the Working Groups.

10.3.3.3. Review work products for presentation to Executive Council and Senior Steering Board.

10.3.3.4. Draft integrated FAA and FNA documents as well as the Joint Capability Document.

10.3.3.5. Execute formal staffing of HD/CS CBA team products.

10.4. Working Groups – aligned with each of the key study areas from the HD/CS Joint Operating Condition (JOC)

10.4.1. Chairs: Team Lead (O-6/O-5) assigned by designated N-NC Director [see POCs list in section 12 for list of Team Leads].

10.4.2. Members: Subject Matter Experts (SMEs) from all key stakeholders to include assigned N-NC directorates, ASD (HD&ASA), OASD (AT&L), OASD-Health Affairs, Joint Staff (JS), Combatant Commands (COCOMs), Services, NGB, interagency, intelligence community, and other mission partners.

10.4.3. Functions:

10.4.3.1. Produces FAA, FNA studies and JCD document.

10.4.3.2. Conducts research and document sources and evidence.

10.4.3.3. Develops assigned work products.

10.4.3.4. Provides SMEs on assigned study areas.

10.4.3.5. Presents results to IRG and SSB.

10.4.3.6. Prepares briefing materials and staff actions.

10.5. Analytic Support Team (AST)

10.5.1. Leads: Mr. Pete Puhek (N-NC/J84); Mr. Pat Collson, CTR.

10.5.2. Members: N-NC/J84 Analytics team support and Contractor (CTR) personnel as assigned.

10.5.3. Functions:

10.5.3.1. Supports development and staffing of HD and CS CBA Scenarios.

10.5.3.2. Develops and execute HD and CS CBA workshops/table top exercises and red team events.

10.5.3.3. Provides supporting briefings and staff actions for analytical requirements of the CBA.

11. Organizational Responsibilities.

11.1. NORAD and USNORTHCOM.

11.1.1. Serves as the study lead.

11.1.2. Appoints a study director.
11.1.3. Assigns Chairs of the Executive Council and Integration and Review Group.
11.1.4. Assigns Leads for each of the Working Groups.
11.1.5. Assigns Subject Matter Experts to each of the Working Groups.
11.1.6. Establishes, coordinates and directs activities.
11.1.7. Presents the HD/CS CBA products for coordination and approval through the JCIDS process.
11.1.8. Provide advocacy for HD/CS capabilities within the DOD decision support processes (JCIDS, PPBE, and DAS).
11.1.9. Assigns Quality Assurance Evaluator (QAE) to oversee funding issues and execution for all contract support issues/execution.

11.2. Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (OASD HD & ASA)
11.2.1. Serves as member of the Executive Council, Senior Steering Board, and Integration and Review Group.
11.2.2. Provides policy guidance.
11.2.3. Leads coordination and facilitation of HD/CS CBA activities with stakeholders external to DOD.
11.2.4. Coordinates and arranges Senior Level Interagency meetings/forums, as appropriate beyond the Senior Steering Board, to collaborate and share information on progress and results of the HD/CS CBA.
11.2.5. Assigns appropriate Subject Matter Experts to the Working Groups.
11.2.6. Develops FAA and FNA inputs (as required).
11.2.7. Participates in HD/CS CBA Workshop and Wargame Events.

11.3. Services, Agencies, and Combatant Commands
11.3.1. Serve as members of the Executive Council, Senior Steering Board, Integration and Review Group.
11.3.2. Assign subject matter experts to the Working Groups as required.
11.3.3. Develop FAA and FNA inputs (as required).
11.3.4. Provide the Working Groups with insights into current and planned capabilities.
11.3.5. Provide FY10-15 POM submissions on HD and CS capabilities.
11.3.6. Participate in HD/CS CBA Workshop and Wargame Events.
11.3.7. DIA provides an assessment of the operational environment scoped in the CBA, and conduct an ITWA per CJCSM 3170.01C

11.4. National Guard Bureau
11.4.1. Serve as members of the Executive Council, Senior Steering Board, and Integration and Review Group.
11.4.2. Assign Subject Matter Experts to the Working Groups as required.
11.4.3. Develop FAA and FNA input (as required).
11.4.4. Provide input to FY10-15 POM submissions on HD and CS capabilities.
11.4.5. Participate in HD/CS CBA Workshop and Wargame Events.

11.5. The Joint Staff

11.5.1. Serve as members of the Executive Council, Senior Steering Board, and Integration and Review Group.
11.5.2. Assign Subject Matter Experts to the Working Groups as required.
11.5.3. Develop FAA and FNA inputs (as required).
11.5.4. Provide the Working Groups with insights into current and planned capabilities.
11.5.5. Through the Force Protection Functional Capability Board, assists in coordinating HD/CS CBA work products through the JCIDS process.
11.5.6. Assist in the coordination and facilitation of HD and CS CBA activities throughout the DOD.
11.5.7. Participate in HD/CS CBA Workshop and Wargame Events.

11.6. Interagency Organizations
11.6.1. Serve as members of the Executive Council, Senior Steering Board and Integration and Review Group.
11.6.2. Assign Subject Matter Experts to the working groups as required.
11.6.3. Develop FAA and FNA inputs.
11.6.4. Provide the Working Groups with insights into current and planned capabilities.
11.6.5. Assist in the coordination and facilitation of HD and CS CBA activities throughout their organizations.
11.6.6. Participate in HD/CS CBA Workshop and Wargame Events.

11.7. Force Protection(FP) Functional Capabilities Board (FCB)
11.7.1. Ensure the proposed capability approaches are examined for their potential to improve joint operations.
11.7.2. Review and approve HD/CS CBA work products and works with the HD/CS CBA Team to resolve any issues.
11.7.3. Coordinate with supporting FCBs as needed.
11.7.4. Forward the CBA proposals to the Joint Capabilities Board (JCB) for approval or referral to the Joint Requirements Oversight Council (JROC).

12. HD/CS CBA core team points of contact.

Key Government Personnel				
Name	Rank	Functional Area	Phone	Email
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APPENDIX A

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APPENDIX B

Acronym List

AM - Activity Model
AOTR - Aviation Operational Threat Response
ASD - Assistant Secretary of Defense
ASA - Americas' Security Affairs
ASI - Analytical Support Team

C2 - Command and Control
CBA - Capabilities-Based Assessment
CBRNE - Chemical, Biological, Radiological, Nuclear, or high-yield Explosives
CCDR - Combatant Commander
CCJO - Capstone Concept for Joint Operations
CDR - Commander
CHDS - Complementary Homeland Defense Scenarios
CIP - Critical Infrastructure Protection
CJCSI - Chairman, Joint Chiefs of Staff, Instruction
CJCSM - Chairman, Joint Chiefs of Staff, Manual
CM - Consequence Management
CND - Computer Network Defense
COCOM - Combatant Command
COG - Continuity of Government
CONPLAN - Concept Plan
CONOPs - Concept of Operation
CONUS - Continental United States
COOP - Continuity of Operations
CoS - Colorado Springs, Colorado
CS - Civil Support
CTR - Contractor

DAWG - Deputy Advisors Working Group
DC - Washington D.C.
DHS - Department of Homeland Security
DHHS - Department of Health & Human Services
DOD - Department of Defense
DODD - DOD Directive
DOE - Department of Energy
DOJ - Department of Justice
DOS - Department of State
DOT - Department of Transportation
DOTMLPF - Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities
DPS - Defense Planning Scenarios
DSCA - Defense Support of Civil Authorities

EEA - Essential Elements of Analysis
EP - Emergency Preparedness
EPA - Environmental Protection Agency

FAA - Functional Area Analysis
FCB – Functional Capabilities Board
FHA – Foreign Humanitarian Assistance
FNA – Functional Needs Analysis
FP – Force Protection
FSAs – Functional Solutions Analyses
FY – Fiscal Year

HD – Homeland Defense
HDIO – Homeland Defense Integrated Operations
HS – Homeland Security

ICBM – Intercontinental Ballistic Missile
IED – Improvised Explosive Device
IRG – Integration and Review Group

JCA – Joint Capability Area
JCB – Joint Capabilities Board
JCD – Joint Capabilities Document
JCIDS – Joint Capabilities Integration and Development Systems
JIACG – Joint Interagency Coordination Group
JIC – Joint Integrating Concept
JFC (1) – Joint Functional Concept
JFC (2) – Joint Force Commander
JOC – Joint Operating Concept
JP – Joint Publication
JROC – Joint Requirements Oversight Council
JS – Joint Staff

kT – KiloTon

LAAMD – Logistics Analysis Method for Determining Association and Aggregation

MA – Mission Assurance
MACA – Military Assistance to Civil Authorities
MACDIS – Military Assistance for Civil Disturbances
MCTR – Mission - Capability - Task Relationship
MFSD – Multi-Force Source Document
MOE – Measures of Effectiveness
MOTR – Maritime Operational Threat Response
MSCLEA – Military Support to Civilian Law Enforcement Agencies

N-NC – NORAD and USNORTHCOM
NASA – National Aeronautics and Space Administration
NGB – National Guard Bureau
NGO – Non-Governmental Organization

NHSP – National Homeland Security Plan
NORAD – North American Aerospace Defense Command
NPS – National Planning Scenarios
NSSE – National Special Security Event

OASD – Office of the Assistant Secretary of Defense
ODNI – Office of the Director of National Intelligence

POE – Preponderance of Evidence
POM – Program Objective Memorandum
POTUS – President of the United States
PPBE – Planning, Programming, Budgeting, and Execution

RDD – Radiological Dispersion Device
ROMO – Range of Military Operations

SCADA – Supervisory Control and Data Acquisition
SLBM – Sea-Launched Ballistic Missile
SLCM – Sea-Launched Cruise Missile
SME – Subject Matter Experts
SPG – Strategic Planning Guidance
SSB – Senior Steering Board
SSSPs – Steady-State Security Postures

UA – Unmanned Aircraft
UJTL – Universal Joint Task List
US – United States
USDA – United States Department of Agriculture
USJFCOM – US Joint Forces Command
USNORTHCOM – US Northern Command
USPACOM – US Pacific Command
USSOCOM – US Special Operations Command
USSOUTHCOM – US Southern Command
USSTRATCOM – US Strategic Command
USTRANSCOM – US Transportation Command

WG – Working Group
WMD – Weapons of Mass Destruction

APPENDIX C

Glossary

Activity -- A function, mission, action, or collection of actions. (JP 1-02)

Activity Model (AM) -- A diagram that shows all the steps of an activity. AMs can be made up of tasks, relationships, processes and decision nodes arranged chronologically. They are detailed flow charts that facilitate performance analysis. (C2 CBA)

Air Defense -- Defensive measures designed to destroy attacking enemy aircraft or missiles in the atmosphere, or to nullify or reduce the effectiveness of such attack. Also called AD. See also active air defense; aerospace defense; passive air defense. (JP 1-02)

Air & Space Defense -- All measures of Homeland Defense taken to detect, deter, prevent, defeat or nullify hostile air, missile, and space threats, against US territory, domestic population, and critical infrastructure. (HD/CS JOC)

Area of Responsibility (AOR) -- The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. (JP 3-0)

Asymmetric Threat -- Threats that employ innovative, non-traditional tactics, weapons, or technologies and attempt to circumvent or undermine strengths (while exploiting weaknesses using methods that differ significantly from expected methods of operation) through the targeting of US territory, economy, commerce, infrastructure, and/or civilians by avoiding direct military confrontation through the use of those.

Attribute -- A quantitative or qualitative characteristic of an element or its actions. (CJCSI 3170.01F)

Capability -- The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks. It is defined by an operational user and expressed in broad operational terms in the format of a joint or initial capabilities document or a joint doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) change recommendation. In the case of materiel proposals and documents, the definition will progressively evolve to DOTMLPF performance attributes identified in the capability development document and the capability production document. (CJCSI 3170F)

Capability Gaps -- The inability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks. The gap may be the result of no existing capability, lack of proficiency or sufficiency in existing capability, or the need to recapitalize an existing capability. (CJCSI 3170)

Characteristic -- A desirable trait, quality, or property that distinguishes how the future Joint Force should conduct military operations. (CJCSI 3010.02B)

Civil Support (CS) – Department of Defense support to US civil authorities for domestic emergencies, and for designated law enforcement and other activities. (JP 3-28)

Concept of Operations (CONOPS) -- A verbal or graphic statement that clearly and concisely expresses what the joint force commander (JFC) intends to accomplish and how it will be done using available resources. The concept is designed to give an overall picture of the operation. Also called **commander's concept or CONOPS. (JP 1-02)**

Condition -- 1) Those variables of an operational environment or situation in which a unit, system, or individual is expected to operate and may affect performance. (JP 1-02); 2) A variable of the environment that affects performance of a task. (CJCSI 3010.02B)

Consequence Management (CM) -- Actions taken to maintain or restore essential services and manage and mitigate problems resulting from disasters and catastrophes, including natural, manmade, or terrorist incidents. (JP 1-02)

Continental United States (CONUS) -- United States territory, including the adjacent territorial waters, located within North America between Canada and Mexico. (JP 1-02)

Continuity of Government (COG) -- A coordinated effort within each branch of government ensuring the capability to continue branch minimum essential responsibilities in a catastrophic crisis. COG is dependent on effective continuity of operations, plans, and capabilities. DOD COG activities involve ensuring continuity of delegations of authority (where permissible, and in accordance with applicable law); the safekeeping of vital resources, facilities, and records; the improvisation or emergency acquisition of vital resources necessary for the performance of Mission Essential Functions (MEF); and the capability to relocate essential personnel and functions to, and sustain performance of MEF at, alternate work sites(s) until normal operations can be resumed. (DODD 3020.26)

Continuity of Operations (COOP) --

a. The degree or state of being continuous in the conduct of functions, tasks, or duties necessary to accomplish a military action or mission in carrying out the national military strategy. COOP includes the functions and duties of the commander, as well as the supporting functions and duties performed by the staff and others acting under the authority and direction of the commander. (JP 1-02)

b. An internal effort within individual components of the Executive, Legislative, and Judicial branches of government assuring the capability exists to continue uninterrupted essential component functions across a wide range of potential emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies. COOP involves plans and capabilities covering the same functional objectives of COG, must be maintained at a high level of readiness, and be capable of implementation both with and without warning. COOP is not only an integral part of COG and Enduring Constitutional Government (ECG), but is simply "good business practice" – part of the Department of Defense's fundamental mission as a responsible and reliable public institution. (DODD 3020.26)

Critical Infrastructure Protection (CIP) -- Actions taken to prevent, remediate, or mitigate the risks resulting from vulnerabilities of critical infrastructure assets. Depending on the risk, these actions could include: changes in tactics, techniques, or procedures; adding redundancy; selection of another asset; isolation or hardening; guarding, etc. (DODD 3020.40)

Cyber Defense -- All *defensive* measures (particularly computer network defense [CND]) taken to detect, deter, prevent, or if necessary defeat hostile cyber threats against DOD assets and the DIB. (DOD HLS JOC [Version 1.0] definition)

Defense Industrial Base (DIB) -- A world-wide industrial complex, with capabilities to perform research and development and design, produce, and maintain military weapon systems, subsystems, components, or parts to meet military requirements. (Strategy for Homeland Defense and Civil Support)

Defense Support of Civil Authorities (DSCA) – 1) Civil support provided under the auspices of the National Response Plan. (JP 3-28); 2) often referred to as civil support, is DOD support, including Federal military forces, the Department's career civilian and contractor personnel, and DOD agency and component assets, for domestic emergencies and for designated law enforcement and other activities. The Department of Defense provides defense support of civil authorities when directed to do so by the President or Secretary of Defense (Strategy for Homeland Defense and Civil Support).

Department of Defense (DOD) – The Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the combatant commands, the Office of the Inspector General of the Department of Defense, the Department of Defense
agencies, field activities, and all other organizational entities in the Department of Defense.
(JP 1). *For the purpose of this study, the DOD is assumed to include National Guard elements operating in Title 10, Title 32, and State Active-Duty status. This perspective is a strategic one made for the purposes of the study and does not imply a command and control relationship.*

Effects -- The outcomes of actions taken to change unacceptable conditions, behaviors, or freedom of action to achieve desired objectives. (CCJO)

Emergency Preparedness (EP) -- Those planning activities undertaken to ensure DOD processes, procedures, and resources are in place to support the President and Secretary of Defense in a designated National Security Emergency. (HD & CS JOC, V2.0)

End State -- The set of conditions, behaviors, and freedoms that defines achievement of the commander's mission. (CJCSI 3010.02B)

Essential Elements of Analysis (EEA) -- Processes that are necessary to conduct an effective study. EEAs may differ, depending on the issue or experiment being addressed. Generally,

however, EEAs will include an assumption, relevant metrics and measures, data generation and a collection/analysis methodology. Include in the above definition are; 1) Questions to be answered to support objectives and 2) Supported by measures of effectiveness (MOE). (C2 CBA)

Execution -- The initiation of an operation, a military response with operations being conducted. (C2 JIC)

Homeland Defense (HD) – 1) The protection of US sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. The Department of Defense is responsible for HD. (Strategy for Homeland Defense and Civil Support; JP 3-27). *OASD (HD&ASA) contextual comment: Homeland Defense activities to counter terrorist threats are a subset of homeland security, as well as within the mission set supporting the Global War on Terror, as defined within appropriate Presidential Strategies.*

Homeland Security (HS) -- A concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism and minimize the damage and recover from attacks that do occur (National Strategy for Homeland Security; JP 3-27; National Strategy for Homeland Security; JP 1-02). *OASD (HD&ASA) contextual comment: Homeland Security encapsulates both law enforcement and military operations (excluding state threats).*

Information -- Facts, data, or instructions in any medium or form with context that is comprehensible to the user. (JP 3-13.1)

Integration -- The arrangement of military forces and their actions to create a force that operates by engaging as a whole. (JP 1-02)

Interagency -- United States Government agencies and departments, including the Department
of Defense. (JP 1-02, JP 3-08)

Joint Capability Area (JCA) -- JCAs are collections of similar capabilities logically grouped to support strategic investment decision-making, capability portfolio management, capability delegation, capability analysis (gap, excess, and major trades), and capabilities-based and operational planning. JCAs are intended to provide a common capabilities language for use across many related DOD activities and processes and are an integral part of the evolving Capabilities-based Planning process. (CJCSI 3170)

a. **Tier 1 JCA** -- A Tier 1 JCA is a high-level capability category that facilitates capabilities-based planning, major trade analysis, and decision-making. Tier 1 JCAs are comprised of functional-, operational-, domain-, and institutional-based joint capabilities. All DOD capabilities can be mapped to a Tier 1 JCA. (CJCSI 3170)

b. **Tier 2 JCA** -- A Tier 2 JCA is a comprehensive capability area logically placed within a Tier 1 JCA. Tier 2 JCAs are capability areas with sufficient detail to help identify

operationally required military capabilities, or to help identify joint force generation and management capabilities. A Tier 2 JCA scopes, bounds, clarifies, and better defines the intended capability area of its 'parent' Tier 1 JCA. Tier 2 JCAs are intended to reduce duplication between Tier 1 JCAs, and are not Service, mission, or platform specific. (CJCSI 3170)

c. **JCA Taxonomy** -- The structure or framework of joint capabilities, used in conjunction with the JCA Lexicon, to facilitate capabilities-based planning, analysis, and decision-making. (CJCSI 3170)

d. **JCA Lexicon** -- A collection of joint capability definitions that provide a common capabilities language for DOD to facilitate capabilities-based planning, analysis, and decision-making. (CJCSI 3170)

Joint Functional Concept -- A description of how the future joint force will perform a particular military function across the full range of military operations 10-20 years in the future. These concepts support the Capstone Concept for Joint Operations (CCJO) and Joint Operating Concepts (JOCs) and draw operational context from them. They identify required capabilities and attributes, inform JOCs, and provide functional context for Joint Integrating Concept (JIC) development and joint experimentation. (CJCSI 3010.02B)

Joint Integrating Concept (JIC) -- A description of how a Joint Force Commander 10-20 years in the future will integrate capabilities to generate effects and achieve an objective. A JIC includes an illustrative CONOPS for a specific scenario and a set of distinguishing principles applicable to a range of scenarios. JICs have the narrowest focus of all concepts and distill JOC and Joint Functional Concept-derived capabilities into the fundamental tasks, conditions and standards required to conduct Capabilities-Based Assessment. (CJCSI 3010.02B)

Joint Operating Concept (JOC) -- An operational-level description of how a future Joint Force Commander (10-20 years in the future) will accomplish a strategic objective through the conduct of operations within a military campaign. This campaign links end-state, objectives, and desired effects necessary for success. The concept identifies broad principles and essential capabilities and provides operational context for Joint Functional Concept and JIC development and experimentation. (CJCSI 3010.02B)

Knowledge -- Data that has been analyzed to provide meaning and value. Knowledge is various pieces of the processed data that have been integrated and interpreted to begin building a picture of the situation. (JC2 Joint Functional Concept)

Land Defense -- All measures of Homeland Defense taken to detect, deter, prevent, or defeat hostile land threats against US territory, domestic population, and critical infrastructure. (Joint Staff J7 working definition)

Maritime Defense -- All measures of Homeland Defense taken to detect, deter, prevent, or defeat hostile maritime threats against US territory, domestic population, and critical infrastructure. (Joint Staff J7 working definition)

Measure of Effectiveness (MOE) -- A criterion used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. (JP 3-0)

Measure of Performance (MOP) -- A criterion used to assess friendly actions that are tied to measuring task accomplishment. Also called **MOP.** (JP 3-0)

Military Assistance to Civil Authorities (MACA) -- The broad mission of civil support consisting of the three mission subsets of military support to civil authorities, military support to civil law enforcement agencies, and military assistance for civil disturbances. (JP 1-02)

Military Assistance for Civil Disturbances (MACDIS) -- A mission set of civil support involving DOD support, normally based on the direction of the President, to suppress insurrections, rebellions, and domestic violence, and provide federal supplemental assistance to the States to maintain law and order. (JP 1-02)

Military Support to Civilian Law Enforcement Agencies (MSCLEA) -- A mission of civil support that includes support to civilian law enforcement agencies. This includes, but is not limited to: combating terrorism, counter-drug operations, national security special events, and national critical infrastructure protection and key asset protection. (JP 1-02)

Mission -- 1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task. (JP 1-02)

Mission Assurance (MA) – A process to ensure that assigned tasks or duties can be performed in accordance with the intended purpose or plan. It is a summation of the activities and measures taken to ensure that required capabilities and all supporting infrastructures are available to the DOD to carry out the National Military Strategy. It links numerous risk management program activities and security related functions-such as force protection; antiterrorism; critical infrastructure protection; information assurance; continuity of operations; chemical, biological, radiological, nuclear, and high-explosive defense; readiness; and installation preparedness-to create the synergistic effect required for DOD to mobilize, deploy, support and sustain military operations throughout the continuum of operations. (DODD 3020.40)

Mission Partners -- Those entities outside the command structure that contribute to the mission (interagency, multinational non-governmental organization [NGOs], etc.) (C2 JIC)

Objective Value -- The desired operational goal associated with a performance attribute beyond which any gain in utility does not warrant additional expenditure. The objective value is an operationally significant increment above the threshold. An objective value may be the same as the threshold when an operationally significant increment above the threshold is not significant or useful. (CJCSI 3170)

Range of Military Operations (ROMO) -- Operations that vary in size, purpose, and combat intensity that extend from military engagement, security cooperation, and deterrence activities to crisis response and limited contingency operations and, if necessary, major operations and campaigns. (Derived from JP 3-0).

Standard -- 1) Quantitative or qualitative measures for specifying the levels of performance of a task. (CJCSI 3170); 2) The minimum proficiency required in the performance of a task. For mission-essential tasks of joint forces, each task standard is defined by the joint force commander and consists of a measure and criterion. (CJCSI 3010.02B)

Task -- An action or activity (derived from an analysis of the mission and concept of operations) assigned to an individual or organization to provide a capability. (CJCSM 3170.01C)

Task - Operational -- A discrete event or action enabling a mission or function to be accomplished by individuals or organizations. (MORS Conference 2004 and CJCSI 3010.02B)

Threshold Value -- A minimum acceptable operational value below which the utility of the system becomes questionable. (CJCSI 3170)

Tradespace -- Degree of flexibility in trading performance objectives against one another to achieve best value. (Department of the Navy Acquisition Strategy Decision Guide)

APPENDIX D

Expanded Scenario Discussion

Homeland Defense and Civil Support
Capabilities-Based Assessment
Scenarios

Introduction

This paper puts forward three scenarios for use in the Homeland Defense and Civil Support (HD/CS) Capabilities Based Assessment (CBA). These scenarios provide the conditions against which our capabilities will be measured in the CBA. They will also help define the capabilities needed for HD/CS. NOTE: The events in these scenarios are possible, but no inference should be drawn regarding the likelihood of them occurring.

These scenarios must meet several conditions: They must cover the entire spectrum from Homeland Defense to Civil Support; they must collectively stress all domains and mission areas considered in the HD/CS CBA; they must be credible; they must be plausible; they must address both steady state and surge capabilities; and they must provide homeland defense centric scenarios that will strengthen homeland defense analysis that has not been sufficiently examined at this time.

Spectrum and domain/mission area coverage. The scenarios are built using basic building block scenarios from the Analytic Agenda: the National Planning Scenarios (NPSs), the Defense Planning Scenario (DPS), and the Steady State Security Posture scenarios (SSSPs). Although the Analytic Agenda covers the years 2011-2017, and the HD/CS CBA covers the years 2010-2015; these scenarios are set in 2014, which is part of the overlap. Choices of the building blocks were made based on military judgment. These building block scenarios were chosen specifically to cover the entire continuum from Homeland Defense to Civil Support and are sufficiently varied to cover all tasks, domains, and mission areas considered in the HD/CS CBA

Credibility. In order for the scenarios used for the HD/CS CBA to be credible, they must be based on existing, approved scenarios. The basic building block scenarios come from the Analytic Agenda. The three scenarios put forward here use these basic scenarios, but combine several of the building blocks in each to present realistic and stressing conditions for Homeland Defense and Civil Support. In combining the basic scenarios, some modifications, as allowed by the DPS, were necessary in order to build coherent, cohesive, and credible scenarios.

Plausibility. The scenarios have been built with intelligence projections of technical feasibility in mind in order to ensure they are plausible. This does not imply anything regarding the probability of these events occurring.

Steady state and surge. Steady State Security Posture (SSSP) scenarios are, by definition, those that can be executed without perturbing a Service rotation base and related policies. In contrast, Surge Scenarios are those that may perturb a Service rotation base and related policies. The

SSSPs have been included to make sure steady state capabilities can be addressed. Surge requirements are covered by including NPS and DPS elements.

In keeping with DOD policy, NPS and DPS approved scenarios must serve as the underpinning to DOD analyses, of which the Analytic Agenda and Capabilities-Based Assessments are elements. Deviations in terms of multiple, near-simultaneous events are allowed with the restriction that the scenario basics (e.g., type of delivery device, payload) not be changed. The scenario "packages" proposed here conform to this restriction.

Scenarios

The three scenarios put forward here are 1) a scenario representing a coordinated attack against the United States planned by state actors, 2) a scenario representing a coordinated attack against the United States planned by non-state actors, and 3) a scenario positing near-simultaneous natural disasters occurring in the NORAD-USNORTHCOM Area of Responsibility. This paper will lay out the basics of the scenarios, with the "road to war" details to be added as the scenarios are further developed. The figures provide an illustration of each scenario. Although time occurs left to right, there is no scale; the purpose of the illustrations is to present the relationship between and among the events. The "star burst" is intended to show when a threat or disaster event actually occurs. The orange rectangles represent the timeframe for DOD to anticipate, deter, prevent, and defeat an adversary's actions. The contributions of Intelligence, while not specifically represented in this paper, will be examined parametrically throughout each scenario. The blue rectangles represent Civil Support activities (National Planning Scenarios) to mitigate results of an attack. The green rectangles and arrows represent activities that will be taken as part of steady-state operations.

Scenario 1: State Actor Scenario (Figure 1)

Scenario 1 Introduction

In 2014, the countries Red and Orange launch a limited but coordinated attack on the United States. The attack begins with a cyber attack against financial systems. Two weeks later, Red launches a sea-launched ballistic missile (SLBM) with a 10 kiloton (kT) warhead against Los Angeles followed shortly by an intercontinental ballistic missile with a 150 kT warhead launched against Hawaii with the initial prediction of impact area including part of the west coast of the continental US. Orange also launches a sea launched cruise missile with weaponized anthrax against Washington, DC.

These attacks are in response to the US retaliation against Orange for their involvement in terrorist activity in the United Kingdom.

These actions could lead to further escalation and ultimately to a nuclear attack by the US on a grand scale. However, since the purpose of this scenario is for the development of homeland defense and civil support capabilities in the US, the scenario does not expand upon the response of the other US CCDRs (beyond those responses that are HD or CS) that ultimately terminate Red offensive operations.

This scenario specifically examines the response of US forces to an attack on the homeland. The response effort in this scenario is limited to HD and CS activities in CONUS and in the approaches. US forces anticipate, deter, and prevent future attacks while simultaneously mitigating further suffering from the attacks that struck the homeland.

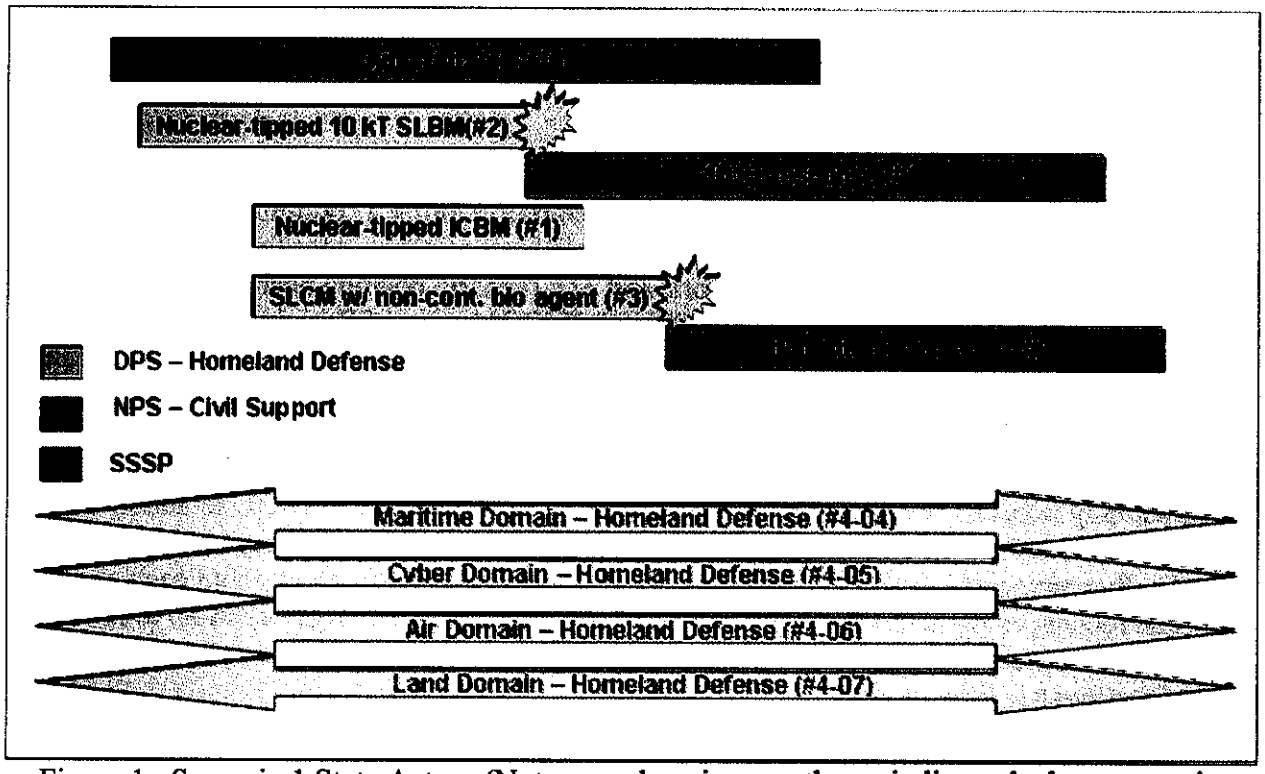

Figure 1: Scenario 1 State Actor. (Note: numbers in parentheses indicate the base scenario used: e.g., "Maritime Domain – Homeland Defense (#4-04)" refers to Steady-State Security Posture #4-04)

Scenario 1 Assumptions

- The attacks in this scenario are sufficiently significant to cause harm (and in the case of the cyber attack, to be noticeable by Federal and commercial entities). They may cause heightened levels of force readiness and a transition from steady-state to surge conditions within the scenarios.

- The current development, employment, and deployment of US Homeland Defense systems regarding the maritime, air, land, and cyber domains continue except where defensive actions incorporate those steady-state actions. For example, response to a cyber attack may include all actions undertaken in a steady-state Homeland Defense environment.

- US military obligations outside North America will continue.

- The Department of Defense (DOD) will be asked by the appropriate civil authorities for support in managing the consequences of the successful attacks and that support will be directed by the Secretary of Defense. These areas of response will be in support in responding to the cyber attack, support in managing the consequences of the 10 kT nuclear attack, and support in managing the consequences of the anthrax attack.

- National Guard forces will be available.

Scenario 1 Timeline

Orange is involved in supporting terrorist activities in United Kingdom in 2014. There is clear evidence of Orange's support. As part of supporting a strong ally, the US participates in a blockade of Orange, which also has the effect of curtailing Red's exports to Orange. Red launches a cyber attack against US financial systems with an objective of inducing the US to withdraw its participation in the blockade of Orange and prepares for additional escalation of hostilities against the US in case the cyber attack does not have the desired effect. US forces increase their readiness and prepare for further escalation by Red. The US imposes a blockade of the Red in retaliation for its cyber attacks on the US. Two weeks after beginning the cyber attack against the US, Red retaliates against the blockade by launching a sea-launched ballistic missile with a 10 kT warhead against Los Angeles and following that closely with an inter-continental ballistic missile launch against Hawaii. The ICBM goes off course and impacts the Pacific Ocean without exploding. One day later, Orange launches a sea-launched cruise missile (SLCM) with anthrax against Washington, DC.

Scenario 1 Reference Scenarios

This scenario includes variations of the nuclear-tipped 10 kT sea-launched ballistic missile DPS, the nuclear tipped inter-continental ballistic missile DPS, the sea-launched cruise missile with a non-contagious biological agent DPS, the cyber attack NPS, the 10 kT response NPS, and the biological attack response NPS. It also posits the on-going maritime, cyber, air, and land SSSPs.

Scenario 2: Non-State Actor Scenario (Figure 2)

Scenario 2 Introduction

In 2014, under country Pink's sponsorship, terrorist group Red launches a cyber attack against US financial and infrastructure systems because of US actions against Pink. Shortly thereafter, Red launches simultaneous attacks against two US naval ports: Norfolk, VA; and San Diego, CA. They also launch an unmanned aircraft (UA) carrying weaponized anthrax against San Diego from Mexico. In a coordinated effort, they also set off two radiological dispersal devices (RDDs) in US airports, one at the Atlanta International Airport and one at the Dallas-Fort Worth International Airport.

Scenario 2 Assumptions

- The attacks in this scenario are sufficiently significant to cause harm (and in the case of the cyber attack, to be noticeable by Federal and commercial entities). They may cause heightened levels of force readiness and a transition from steady-state to surge conditions within the scenarios.

- The current development, employment, and deployment of US Homeland Defense systems regarding the maritime, air, land, and cyber domains continue except where defensive actions incorporate those steady-state actions. For example, response to a cyber attack may include all actions undertaken in a steady-state Homeland Defense environment.

- US military obligations outside North America will continue.

- The DOD will be asked for support in managing the consequences of the successful attacks by the appropriate civil authorities and that support will be directed by the Secretary of Defense. These areas of response will be in supporting the response to the cyber attack, supporting managing the consequences of the anthrax attack, and supporting the response to the RDDs.

- National Guard forces will be available.

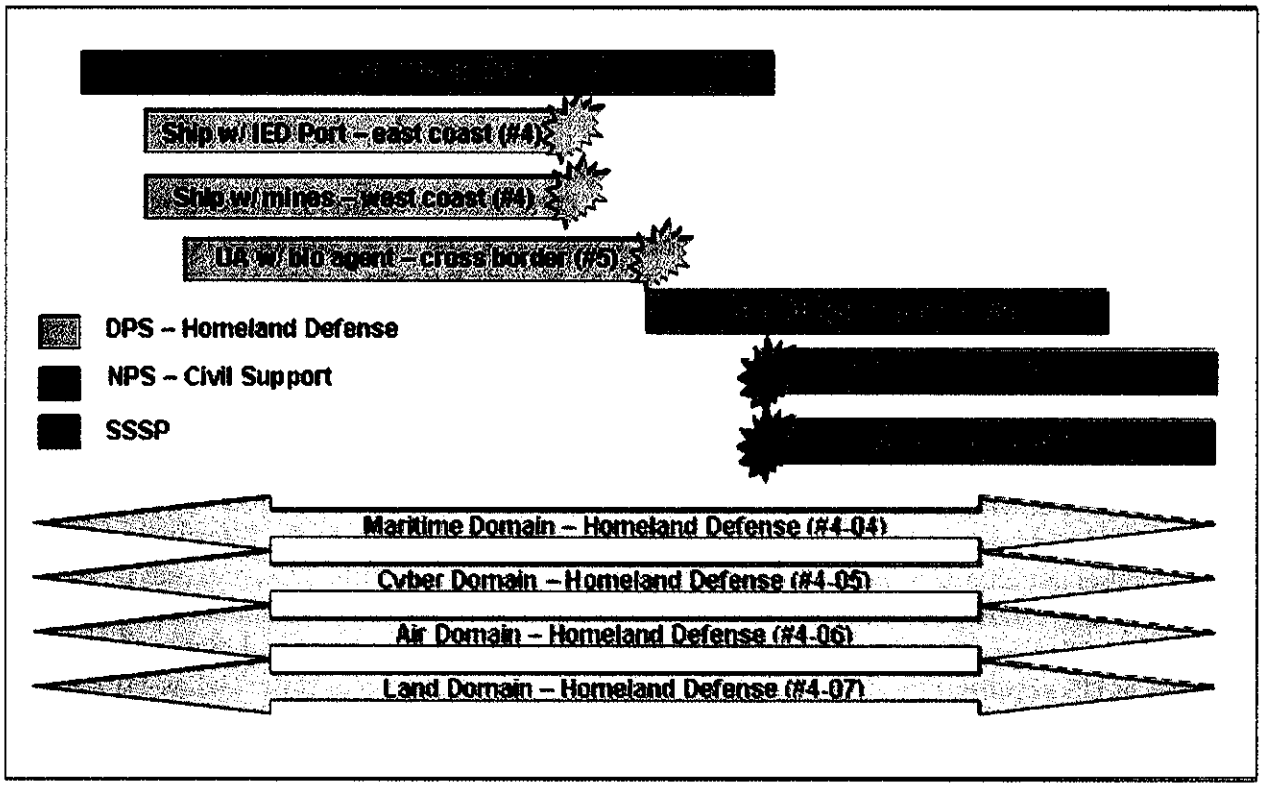

Figure 2: Scenario 2 Non-State Actor. (Note: numbers in parentheses indicate the base scenario used: e.g., "Maritime Domain – Homeland Defense (#4-04)" refers to Steady-State Security Posture #4-04)

Scenario 2 Timeline

In late spring and early summer, US forces invade Pink to counter Pink activities in a neighboring country. In mid-summer, with Pink backing, Red begins a cyber attack against US financial and infrastructure systems. One week later, they simultaneously explode ships loaded with conventional explosives in the naval ports of Norfolk, VA and San Diego, CA. One day after that, they launch a UA from Mexico against San Diego, CA, dispensing weaponized anthrax over the city. Two weeks after that, they detonate RDDs in the Atlanta International Airport and Dallas-Fort Worth's International Airport.

Scenario 2 Reference Scenarios

This scenario includes variations of the attack on a US port DPS, the unmanned aerial vehicle cross border attack with a non-contagious biological agent DPS, the cyber attack NPS, the biological attack response NPS, and the RDD attack NPS. It also posits the on-going maritime, cyber, air, and land SSSPs.

Scenario 3: Natural Disaster Scenario (Figure 3)

Scenario 3 Introduction

In 2014, heavy rains in country Green result in severe flooding, prompting Green to call on the US for assistance. Shortly after the requested assistance begins, there is a National Special Security Event (NSSE), a G8 Summit meeting, in Texas. Shortly after that, a major earthquake happens in the southern US. There are also major problems in Aqua, leading the Aqua government to request humanitarian assistance from the US. All this occurs in late summer, and a heavy hurricane season is shaping up in the Atlantic.

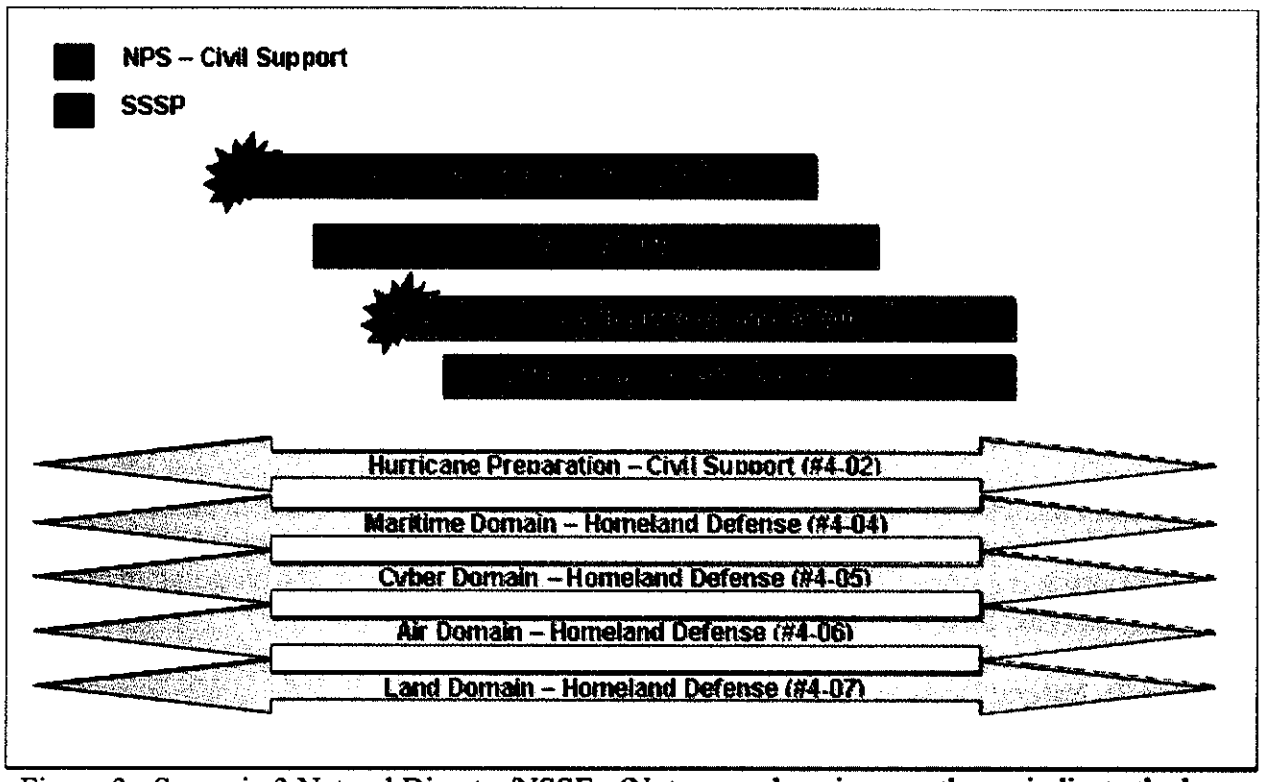

Figure 3: Scenario 3 Natural Disaster/NSSE. (Note: numbers in parentheses indicate the base scenario used: e.g., "NSSE (#4-08)" refers to Steady-State Security Posture #4-08)

Scenario 3 Assumptions

- The events in this scenario are sufficiently significant to cause a response on the part of the US Government. They may cause heightened levels of force readiness and a transition from steady-state to surge conditions within the scenarios.

- The current development, employment, and deployment of US Homeland Defense systems regarding the maritime, air, land, and cyber domains continue.

- US military obligations outside North America will continue.

- The Department of Defense (DOD) will be asked for support in managing the consequences of these events by the appropriate civil authorities and that support will be directed by the Secretary of Defense. These areas of response will be in helping manage the consequences of an earthquake and assisting in providing Foreign Humanitarian Assistance (FHA) to both Green and Aqua.

- The Department of State has the lead in FHA missions, and DOD will be asked to support the efforts.

- National Guard forces will be available.

- Aqua's natural disaster is near simultaneous to the earthquake in the United States.

Scenario 3 Timeline

In late summer, there are heavy rains in Green, causing major flooding portions of the country. Green requests assistance from the US. Approximately one month later, there is a G8 Summit meeting in Texas, which is designated an NSSE and requires DOD support. Two days after the start of setting up for the NSSE, there is a major earthquake in the southern US. Simultaneously, there is a natural disaster in Country Aqua, causing that government to request assistance from the US Government. The request would limit DOD support to providing airlift and supplies for humanitarian relief. Meanwhile, the hurricane season in the Atlantic and Gulf of Mexico is promising to be a big one, necessitating significant preparation on the part of local, state, and federal agencies, including the DOD.

Scenario 3 Reference Scenarios

This scenario includes variations of the earthquake NSP, the National Special Security Event SSSP, the Humanitarian Assistance #1 SSSP, the Humanitarian Assistance #2 SSSP, the hurricane preparation SSSP, and the on-going maritime, cyber, air, and land SSSPs.

Sources:

1. Appendix to Homeland Defense & Civil Support, Defense Planning Scenario (Classification: SECRET//REL TO USA, AUS, CAN GBR)
   Date: 29 March 2007

2. National Planning Scenarios, version 21.2 DRAFT (Classification: UNCLASSIFIED)
   Date: 27 February 2006

3. DOD-1322-4680-07, Vol ID: Scenario Data: Illustrative Steady State Security Posture for 2014 Multi-Service Force Deployment, Volume ID: US Northern Command and US Southern Command Vignettes (Classification: SECRET//REL TO USA, AUS, CAN, GBR//MR)
   Date: 25 June 2007