COUNTERPROLIFERATION OPERATIONAL ARCHITECTURE

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Prepared by USSTRATCOM and USSOCOM

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(U) SECTION I (U)

(U) EXECUTIVE SUMMARY (U)

5 (U) The counterproliferation (CP) of Weapons of Mass Destruction (WMD) continues to 6 be a top priority for the United States Government (USG) and the Department of Defense (DoD). 7 Chemical, biological, radiological and nuclear capabilities are finding their way into the hands of 8 governments and terrorist organizations intent upon disputing regional stability and harming 9 Americans at home and abroad. America's armed forces must be prepared to act against any 10 adversary threatening to acquire and use WMD against our forces, interests, friends or coalition 11 partners.

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(U) This report documents the Counterproliferation Operational Architecture (CPOA) 13 developed in response to a Joint Requirements Oversight Council (JROC) tasking. The 14 information collected and the resulting database will be used to develop a CP Capstone 15 Requirements Document (CRD) and a CP investment strategy to integrate wide-ranging DoD CP 16 programs and ensure efficient funding of capabilities required to counter the growing WMD 17 threat. USSTRATCOM and USSOCOM are the co-leads in this effort and have worked in 18 conjunction with pillar lead organizations for Counterforce (CF) - US Air Force; Active Defense 19 (AD) - Joint Theater Air and Missile Defense Organization; Passive Defense (PD) - US Army; 20 and Consequence Management (CM) - Joint Forces Command (originally), subsequently 21 assumed by Joint Staff J5/ Nuc & CP. These four separate organizations were tasked to develop 22 23 the four "pillar" architectures to be integrated into the single CPOA. The assignment of four individual pillar leads had the potential outcome of trying to integrate four incompatible 24 products. Therefore, the first order of business was to establish the methodology to be used in 25 developing the various pillar architectures. 26

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(U) The C4ISR Architecture Framework, Version 2.0 states that an operational 28 29 architecture is a description of the tasks, and activities, operational elements, and information flows required to accomplish or support a military operation. The CP continuum is summed up 30 by the phrase: 'Every NBC weapon (WMD) that is destroyed before it is used (CF), is one less 31 we must intercept (AD), or absorb (PD) and mitigate (PD/CM). Mission area definitions, 32 expanded from the above phrase, were used by the pillar leads to develop their architectures. 33 The pillar leads followed a strategy-to-task methodology to flesh-out the architectures, first by 34 establishing pillar core elements, and then decomposing these elements down into activities and 35 major tasks, tasks, sub-tasks, etc. To provide an operational context, the completed sets of pillar 36 37 tasks were aligned against the missions found in the Chairman of the Joint Chiefs of Staff 38 Concept Plan (CJCS CONPLAN) 0400, Counterproliferation of Weapons of Mass Destruction, and merged into the integrated CPOA. The CPOA contains a comprehensive integrated set of 39 pillar tasks covering the spectrum of CP operations aligned against the CJCS CONPLAN 0400 40 missions. Information exchange requirements (IERs) were identified in both a detailed, task 41 specific listing, and in a more generic CJCS CONPLAN 0400 mission listing. Finally, UJTLs 42 43 for each task were assigned. While it is important to show the alignment of CP tasks against CJCS CONPLAN 0400 missions, it is also necessary to understand the objectives of these 44 45 missions within a given phase of the plan. 46

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l (U) The Counterproliferation Operational Concept (CPOC) was written to provide a vehicle to link CP core capabilities and key enablers with the military operations and activities 2 required to support our nation's efforts in countering the proliferation of WMD. The concept 3 considers and integrates seminal CP documents and efforts and provides the overarching, 4 common framework upon which the development of the CPOA was based. The CPOC is 5 presented as a narrative based on the operational phases as outlined CJCS CONPLAN 0400. 6 These phases are: Phase 1, Continual Deterrence: Phase 2, Enhanced Deterrence Operations; 7 Phase 3, Decisive Combat Operations; and Phase 4, Restorative Operations. Additionally, the 8 9 CPOC discusses the nine-phase adversary proliferation continuum beginning with the decision to acquire or produce WMD to the actual employment and effects of WMD use. Further, the 10 CPOC contains narrative descriptions of the four phases of CJCS CONPLAN 0400 and a 11 graphic, depicting the integration of and linkages between the CP Hierarchy and the proliferation 12 continuum. Referencing the proliferation continuum and the applicable operational tasks from 13 the hierarchy provides a useful picture of the complexity of CP operations. 14

15

16 (U) Essentially, the CPOA is a relational database containing all the relevant CP tasks and associated information. The co-leads felt the need to establish a firm foundation from which 17 18 to review or interpret the CPOA. Accordingly, the report contains a synopsis of the top-level CJCS CONPLAN 0400 missions and the integrated pillar tasks contributing to mission 19 accomplishment. The missions are addressed at the highest level possible still allowing for task 20 differentiation between similar missions. The missions required to execute each phase of CJCS 21 CONPLAN 0400 are briefly described. Phase 1, Continual Deterrence, contains 29 missions; 22 23 Phase 2, Enhanced Deterrence, contains 8 missions; Phase 3, Decisive Combat Operations, contains 19 missions; and Phase 4, Restorative Operations, contains 6 missions. Additionally, a 24 mission numbering methodology is utilized. While mission numbers do not appear in CJCS 25 26 CONPLAN 0400, the project co-leads established the system to provide easier cross-reference to the text, spreadsheet and database products contained in this report. The CPOA is a precursor to 27 the CP Capstone Requirements Document (CRD). One of the required elements of a CRD is a 28 29 section containing Information Exchange Requirements (IERs).

30

(U) The CPOA contains an eight-page spreadsheet identifying CP IERs. These CP 31 critical IERs are characterized by: Command and Control (C2), Situational Awareness (SA), 32 Threat, Fire Support, Logistics, Personnel and Targeting. Additionally, the sending and 33 34 receiving node of the critical information are identified. These are the *producers* and *users* of the critical CP information. The CP IERs are grouped according to CJCS CONPLAN 0400 and 35 will be included in the forthcoming CP CRD. Specific task IERs are contained within the 36 CPOA. These specific IERs can be used when developing focused material solutions to 37 validated CP deficiencies. 38

39

(U) It is important to note that the CPOA does not assign a priority to a pillar in
 determining potential weight of effort toward mission accomplishment in a mission area, nor to a
 given task within a pillar. While the CPOA contains all potential tasks covering the CP
 spectrum, the relevance of tasks, required to accomplish a given operation, is situationally
 dependent on the mission objectives and pillar taskings.

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3	(U) SECTION II (U)
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5	(U) INTRODUCTION (U)
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7	(U) Counterproliferation (CP) of Weapons of Mass Destruction (WMD) continues to be a
8	top priority for the United States Government (USG) and the Department of Defense (DoD).
9	Ideally, efforts to develop, refine, and improve DoD CP capabilities should compliment and
10	enhance one another. Duplicative or competing CP programs and activities can squander scarce
11	resources. A well-coordinated, integrated investment strategy with wide-spread DoD visibility
12	will ensure development and funding of the most effective capabilities mix to protect US
13	national interests against growing WMD threats.
14	
15	(U) Joint Requirements Oversight Council Memorandums (JROCMs) 162-00 and 163-
16	00, dated 26 Sep 00, tasked the development of a CP Operational Concept, CP Operational
17	Architecture (CPOA), and CP Capstone Requirements Document (CRD). Together, these
18	documents and the investment strategy derived from them will represent the Integrated CP
19	Roadmap upon which future CP requirements generation will be based. USSOCOM and
20	USSTRATCOM were assigned as co-leads for this effort. Pillar leads, assigned to develop the
21	CP core capabilities' inputs, were as follows:
22	Counterforce – US Air Force;
23	Active Defense – Joint Theater Air and Missile Defense Organization;
24	Passive Defense – US Army;
25	Consequence Management – USJFCOM(originally); subsequently assumed by
26	Joint Staff J5/Nuc & CP.
27	(II) De 'Illing on the CD On the I Construction of the Illing Construction IV. College Terror
28	(U) Building upon the CP Operational Concept accepted by a Senior warlighters Forum
29	(Swarf) on 16 Apr 01 and approved by the JROC, the project co-leads used a pillar-based
30	approach to determine necessary tasks required to accomplish CJCS CONPLAN 0400 CP
31	missions. These tasks, identified in cooperation with the philar leads and their contractors, were
32	and missions. In accordance with mideree from lateree muchility and Support chility of National
24	Security Systems, and Information Technology Systems (CICSI 6212 01B), the tasks also have
35	associated Information Exchange Requirements (IERs) consisting of information descriptions
36	receiving nodes and sending nodes. More than 780 individual tasks are resident in the CPOA
37	database From these tasks and their associated IFRs some 190 critical CP IFRs have been
38	identified and associated with the appropriate CICS CONPLAN 0400 missions. The CPOA
30	information resident in the database will serve as the basis for developing an overarching CP
40	Mission Needs Statement (MNS) and CP Canstone Requirements Document (CRD) leading to a
41	CP Investment Strategy for the FY04 POM. The assignment of four individual nillar leads had
42	the potential outcome of trying to integrate four incompatible products. Therefore the first order
43	of business was to establish the methodology to be used in developing the various architectures.
44	
45	(U) The remainder of this section outlines the methodology used in creating the CPOA.
46	While covering the spectrum of CP operations, the four core capabilities may overlap in certain

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1 2 3	mission areas. Using the CP Operational Concept as the foundation, pillar capabilities were defined, in an effort to minimize task overlap. The emphasis indicated in the definitions facilitates identifying the transition points between pillar capabilities.		
5 6 7	(U) Counterforce (CF) : operations that are intended to divert, deny, degrade, or destroy an adversary's capability to develop, manufacture, stockpile, and employ weapons of mass destruction before they can be used .		
9 10	(U) Active Defense (AD): measures taken to detect, divert or destroy enemy weapons of mass destruction and delivery means while enroute to their targets.		
11 12	(U) Passive Defense (PD): actions taken to protect US, allied, and coalition		
13 14 15	agents, individual and collective protection equipment, NBC medical response, vaccines for BW defense, NBC decontamination capabilities, doctrine and		
16 17	training.		
18 19	(U) Consequence Management (CM) : measures taken to protect public health and safety, restore essential government services, and provide emergency relief		
20 21	to governments, businesses, and individuals affected by the consequences of a chemical, biological, radiological, nuclear and/or high-yield explosive situation.		
22 23	(U) Counterforce is preemptive, or offensively reactive. Active Defense addresses		
24 25 26 27	enroute threats. Passive Detense has pre-attack mitigating actions and post-attack actions to restore operations tempo. Consequence Management is focused on full recovery from the effects of an event, regardless its cause. Passive defense and consequence management contain the largest task overlap		
28 29 20	(U) To illustrate the CP continuum, consider the statement:		
31 32 33 34	 (U) Every NBC weapon (WMD) that is destroyed before it is used (CF), is one less we must intercept (AD), or absorb (PD) and mitigate (PD/CM). (see OV-1 on page 33) 		
35 36 37	(U) Guidance on architecture content, contained in C4ISR Architecture Framework, Version 2.0, was used to standardize the look and format of the core architectures. The guidance states:		
38 39 40 41 42	(U) "The operational architecture view is a description of the tasks and activities, operational elements, and information flows required to accomplish or support a military operation.		
43 44 45 46	(U) It contains descriptions (often graphical) of the operational elements, assigned tasks and activities, and information flows required to support the warfighter. It defines the types of information exchanged, the frequency of exchange, which tasks		

1	and activities are supported by the information exchanges, and the
2	nature of information exchanges in detail sufficient to ascertain
3	specific interoperability requirements. Tenets that apply to the
4	operational architecture view include the following:
5	
6	• (U) The primary purpose of an operational architecture is to
7	define operational elements, activities and tasks, and
8	information exchange requirements
9	• (U) Operational architectures incorporate doctrine and
10	assigned tasks and activities
11	• (U) Activities and information-exchange requirements may
12	cross organizational boundaries
13	• (U) Operational architectures are not generally systems-
14	dependent
15	• (U) Generic activity descriptions are not based on an
16	organizational model or force structure
17	• (U) Operational architectures should clearly identify the time
18	phase(s) covered (e.g., specific years; "as-is" or "to-be;"
19	"baseline," "planned," and/or "transitional")."
20	
21	(U) Following a "Strategy-to-Task" methodology, the pillar leads were directed to
22	identify core CP elements, major activities, and tasks within their respective core area. Core
23	elements identified for each pillar are as follows:
24	
25	(U) Counterforce: Deliberate Planning (CF1.XX); Training (CF2.XX); Targeting Cycle
26	(CF3.XX)
27	(U) Active Defense: Plan (AD1.XX); Sustain (AD2.XX); Command Control (AD3.XX);
28	Execute (AD4.XX)
29	(U) Passive Defense : Planning (PD1.XX); Deployment (PD2.XX); Extended Operations
30	(PD3.XX); Transition and Redeployment (PD4.XX)
31	(U) Consequence Management: Planning (CM1.XX); Assessment and Deployment
32	(CM2.XX); Immediate Response (CM3.XX); Extended Operations (CM4XX);
33	Transition and Redeployment (CM5.XX)
34	
35	(U) Pillar leads, in coordination with subject matter experts, then decomposed the pillar
36	elements into a complete set of major tasks, tasks, sub-tasks, etc., covering the activities within their representing miller area. The negative grade tasks, tasks, sub-tasks, etc., covering the activities within
3/	their respective plinar area. The resulting product tells "the story" of the plinar within the
38 20	spectrum of CP operations.
39 40	(II) The pillor tooks were aligned conjugat the CICE CONDI AN 0400 missions
40	described in Section V
42	
43	(II) Detailed nillar information exchange requirements (IEPs) were developed containing
44	information characterization description comment and To/From data. The intent is to marga
45	pillar IERs into a single CPOA listing (work in progress). These detailed IERs will be used in
46	developing future focused CRDs and/or ORDs

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- 1 (U) The pillar architectures were merged into a single CPOA. This provides a view of 2 the integrated actions or tasks within a given CJCS CONPLAN 0400 mission. 3 4 5 (U) Generic IERs for each CJCS CONPLAN 0400 mission were developed (see Section 6 VI), using the integrated tasks as the foundation. The IERs will be included in the forthcoming CP CRD. 7 8 9 (U) The final step in the process was assigning UJTLs to the CPOA tasks. 10 11 (U) In summary, the CPOA contains a comprehensive integrated set of pillar tasks covering the spectrum of CP operations aligned against the CJCS CONPLAN 0400 missions. 12 While the majority of the pillar coordination has been accomplished through a small number of 13 pillar representatives, the purpose of this report is to obtain action officer (A/O) collective review 14 and comment across all pillar organizations. 15
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(U) SECTION III (U)

(U) COUNTERPROLIFERATION OPERATIONAL CONCEPT (U)

(U) Executive Summary (U)

1. (U) The Counterproliferation (CP) Operational Concept (Annex A) was written to 5 provide a vehicle to link counterproliferation core capabilities and key enablers with the 6 military operations and activities required to support our nation's efforts in countering the 7 proliferation of weapons of mass destruction (WMD). The concept considers and 8 integrates seminal CP documents and efforts and provides the overarching, common 9 framework upon which the development of the CP Operational Architecture was based. 10

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2. (U) The Operational Concept is presented in phases as outlined in Chairman of the 12 Joint Chiefs of Staff Concept Plan (CJCS CONPLAN) 0400, Counterproliferation of 13 WMD. These phases are: Phase 1, Continual Deterrence; Phase 2, Enhanced Deterrence 14 Operations; Phase 3, Decisive Combat Operations; and Phase 4, Restorative Operations. 15 Each phase in the CP Operational Concept is presented as a narrative based on CJCS 16 CONPLAN 0400. Each narrative is followed by a graphic that captures, on one page, the 17 integration of and linkages between the CP Hierarchy (Figure 1), CP Core Capabilities, 18 CP Key Enablers, CJCS CONPLAN 0400 activities, and the portion of the Adversary 19 20 Proliferation Continuum (Figure 2) most affected by that phase. It is recognized that US forces may well be involved in multiple phases in several areas of the world 21 simultaneously. However, the CP Operational Concept can best be understood by 22 considering the phases as applied to a single adversary, who begins with no existing 23 WMD capability then progresses sequentially through the Adversary Proliferation 24 Continuum, and culminates with employment of a weapon of mass destruction. This 25 view provides an enhanced understanding of proliferation as a process and of CP as a 26 campaign whose phased activities are designed to have specific effects upon that process. 27 28 3. (U) To successfully execute the CP mission, US armed forces require appropriate and 29 30 complementary offensive and defensive capabilities. These capabilities must demonstrate to an adversary the futility of pursuing WMD as a viable threat and must 31 ensure US military forces retain the initiative and freedom of action in a contaminated 32 environment. The mutually supporting CP core capabilities are: counterforce, active 33 defense, passive defense and consequence management. Key enablers serve to 34 35 integrate and balance the core capabilities. As the commander's tools, the key enablers support planning and decision making when considering available CP operational 36 37 options. The key enablers for successful CP operations are: command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR); 38 39 information operations; interoperability; readiness; mobility; and sustainment. The 40 application key enablers integrate the core capabilities into coordinated, synchronized CP activities and operations, and represents the concept of CP battle management. 41 42 4. (U) Proliferation of WMD is a global problem, which routinely crosses combatant 43

44 command geographic boundaries. It spans the entire operational spectrum and must be

45 addressed in a variety of environments and on a continuous basis. Planners and

commanders must consider all available methods and means to determine the most effective and efficient approach to monitoring and countering the proliferation processes. The integration of core capabilities and key enablers, applied continuously through a campaign plan-type approach, will enable the US armed forces to help prevent the acquisition or development of WMD where it does not already exist; deter its use where it does; and protect against its effects if it is employed.

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(U) SECTION IV (U)

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2 (U) CJCS CONPLAN 0400 MISSIONS AND PILLAR INTEGRATION SYNOPSIS

3

1

(U) This section of the report describes the major tasks found in CJCS
CONPLAN 0400. A numbering system was established to allow cross-reference with the
IER matrix spreadsheet (Section VI) and the task descriptions. This numbering format
was also used in the CPOA database. The numbering scheme is associated with the
phases of CJCS CONPLAN 0400:

10		
11	PHASE	CJCS CONPLAN 0400 MISSION NUMBERS
12		
13	Continual Deterrence	1.XX
14	Enhanced Deterrence	2.XX
15	Decisive Combat Operations	3.XX
16	Restorative Operations	4.XX
17	•	

(U) Each mission within each phase described in CJCS CONPLAN 0400 was
 assigned a number for tracking. Additionally, each pillar activity (CF, AD, PD, CM) will
 have tasks occurring within each CJCS CONPLAN 0400 phase.

21

(U) This section contains a single page spreadsheet which will be useful when reviewing the remainder of the section. It will provide the reviewer a visual perspective of the "tiered" numbering system used to cross-reference the CJCS CONPLAN 0400 missions. The missions highlighted in YELLOW contain both *Mission Description* and *Pillar Integration Synopsis* paragraphs in pages 17-30. These missions correlate to the numbered missions contained in the IER spreadsheet located in **Section VI** of this report.

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3	(U) SECTION VI (U)
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5	(U) SUMMARY (U)
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7	(U) A quick review and some parting thoughts:
8	
9	(U) An operational architecture is a description of the tasks, and activities, operational
10	(CAISD A validation flows required to accomplish or support a military operation.
11	(C41SK Architecture Framework, Version 2.0)
12	(11) Counterprediferation Counterprediferation includes activities across the full range
13	of US Government efforts to combat proliferation including the application of military power to
15	protect US forces and interests: intelligence collection and analysis: and support to diplomacy
16	arms control, and export controls: with particular responsibility for ensuring US forces and
17	interests can be protected, should they confront an adversary armed with weapons of mass
18	destruction or missile delivery systems. (Draft JP 3-40)
19	
20	(U) CP crosses through all four operational concepts (Dominant Maneuver, Precision
21	Engagement, Focused Logistics, and Full Dimensional Protection) articulated in Joint Vision
22	2020. The CPOA and the four JV 2020 architectures, under development, must now be
23	integrated for consistency.
24	
25	(U) The CPOA is a database composed of a comprehensive set of tasks describing the
26	spectrum of counterproliferation from the four pillars' perspectives. To provide operational
27	context, these tasks were arrayed against CJCS CONPLAIN 0400 missions.
28	(1) The CPOA is not system dependent, nor is it based on any organizational model or
30	force structure
31	
32	(U) The CPOA does not convey the regional combatant commanders' capability to
33	perform the tasks.
34	•
35	(U) The CPOA does not assign a priority to a pillar in determining potential weight of
36	effort toward mission accomplishment in a mission area, nor to a given task within a pillar.
37	
38	(U) While the CPOA contains all potential tasks covering the CP spectrum, the relevance
39	of tasks, required to accomplish a given operation, is situationally dependent on the mission
40	objectives and pillar taskings.

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