

**Command and Control/  
Cyber and Electronic Warfare  
Integration Division  
Handbook**



1 July 2014

Intentionally Blank

## PREFACE

### **Welcome Aboard**

So you've been assigned to the Command and Control/Cyber and Electronic Warfare Integration Division (C2CEWID) within the Capabilities Development Directorate (CDD), Combat Development and Integration (CD&I)/Marine Corps Combat Development Command (MCCDC). You are now an integral part of the force development process. As a member of an Integration Division you are responsible for defining capabilities through analysis of Joint, Naval and Marine Corps concepts; identifying capability gaps and assessing operational needs identified through lessons learned, Operational Advisory Groups and Universal Need Statements (UNS)/Urgent Universal Need Statements (UUNS); and recommending solutions to close identified gaps and meet operational needs. You are also responsible for taking the appropriate staff action to close gaps and meet needs through doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P) changes. Often the speed and efficiency of your ability to do this job will not only be related to your technical and analytical proficiency it will also be directly related to your staffing ability.

### **Your New Operational Environment**

A quick study of the CD&I/MCCDC organizational structure will reveal that you are at the bottom of a hierarchy with a very broad span of responsibility. It is also important to note that the Marine Corps force development process is tied to Joint force development through the Joint Capabilities Integration and Development System (JCIDS). Additionally, C2 is the warfighting function that harmonizes all other warfighting functions into a meaningful whole and all warfighting functions have cyber and electromagnetic spectrum dependencies.

Developing command and control, cyber operations, and electronic warfare capability requirements within the Marine Corps involves intricate relationships among key stakeholders throughout the Marine Corps, to include the Operating Forces. Staffing related to doctrine, organization, training, leadership and education, and personnel is managed by HQMC CD&I. Staffing related to facilities development must be coordinated through HQMC Installations & Logistics (I&L). Staffing related to policy changes must be coordinated with the respective HQMC staff section. Staffing related to materiel development must be coordinated with Marine Corps Systems Command (MCSC) and NAVAIR in the case of Navy programs that support the Marine Corps.

MCSC is not in DC, CD&I's/MCCDC's chain of command. The staff action/relationship of the two organizations is best defined in *SECNAVINST 5000.2, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System*, the *DON Acquisition and Capabilities Guidebook*, *MARCORSYSCOM Acquisition Guidebook (MAG)* and the *United States Marine Corps Integrated Test and Evaluation Handbook*. The relationship you forge with your counterparts in MCSC will define your ability to both deliver materiel capabilities to the Marine Corps as well as influence programming increasingly scarce resources that will shape the future of the Marine Corps.

The combination of these relationships creates a very dynamic work environment. The collaboration with external organizations alone can consume your monthly calendar with events and meetings. Everyone wants a "CD&I/MCCDC representative" at their meeting to justify CD&I/MCCDC buy-in to the decisions they make. If you are not rock solid in knowing your responsibilities as a member of C2CEWID and how our organization fits into external and internal Marine Corps processes, if you do not have clearly defined goals and a plan of action that guides your effort on a, monthly, weekly, and daily basis – stand by because you will get caught

up in a vortex of back-to-back meetings and TAD trips, many of which will have nothing to do with defining capabilities, identifying gaps, and implementing solutions.

### **Program for Success**

You can avoid the vortex by understanding your roles, responsibilities and my intent. You must have clearly defined goals and a plan of action and milestones (POA&M) to accomplish those goals. There will always be collateral issues and tasks that will warrant your time and attention, but establishing goals and a plan in line with your primary responsibilities will help you fence off the unnecessary activities that can consume your valuable time.

Remember, you are a member of a division. CDD and to a larger extent CD&I/MCCDC is full of resources and personnel with operational, technical, administrative, and staffing expertise. Take advantage of them. C2CEWID is a relatively small staff section. Subjects that we deal with can exceed the scope of our expertise. In those cases, an Integration Division's biggest force multiplier is the Integrated Product Team (IPT). Much of the analysis required is performed by subject matter experts (SMEs) brought together through an IPT. Appendix D provides guidelines for chartering an IPT.

### **Professional Education**

Force development starts from a Joint perspective and ultimately determines the Service's contribution to the Joint capability requirements. Force development requires a thorough knowledge about how the Marine Corps presently operates within a Joint force (doctrine), as well as a thorough understanding about how the Marine Corps intends to conduct operations within a Joint force in the future (concepts).

Division personnel must understand the Marine Corps force development process; JCIDS; Planning, Programming, Budgeting and Execution (PPBE) processes; Defense Acquisition System (DAS), and the staff action required to implement solutions to identified capability gaps and meet the needs of the operating forces. Additionally, you must also be able to assess the DOTMLPF-P implications of implementing an organizational and/or materiel solution. Professional education for Integration Division personnel is continuous. There is always something new to learn. Your effectiveness will be determined not only by what you know but also by your ability to find the information you need. This handbook is a reference that will show you where to look.

### **Closing**

Know your job. Read your respective orders and directives. Set goals. Develop a plan. Stick to the plan. Avoid the vortex. Take advantage of resources. Leverage the use of an IPT. Make time to read. The job is very rewarding. You're supporting force development. What you do will directly impact the operational effectiveness of the United States Marine Corps.

  
GREGORY T. BRENGLE  
Colonel, U.S. Marine Corps  
Director, Command and Control/Cyber and  
Electronic Warfare Integration Division

## TABLE OF CONTENTS

<b>Section</b>	<b>Page</b>
<b>1. Purpose .....</b>	<b>1</b>
<b>2. Why we do what we do.....</b>	<b>1</b>
<b>3. How we do it .....</b>	<b>4</b>
<b>4. DOTMLPF-P .....</b>	<b>8</b>
<b>Doctrine .....</b>	<b>11</b>
<b>Organization .....</b>	<b>15</b>
<b>Training .....</b>	<b>17</b>
<b>Materiel .....</b>	<b>19</b>
<b>Leadership and Education .....</b>	<b>22</b>
<b>Personnel .....</b>	<b>24</b>
<b>Facilities .....</b>	<b>26</b>
<b>Policy .....</b>	<b>28</b>
<b>Appendix</b>	
<b>A Professional Military Education .....</b>	<b>A-1</b>
<b>B Concept of Employment .....</b>	<b>B-1</b>
<b>C CDD/CPD Development Matrix .....</b>	<b>C-1</b>
<b>D Integrated Product Team Guidelines .....</b>	<b>D-1</b>

Intentionally Blank

## 1. Purpose

This handbook provides new and experienced personnel with key information needed to succeed in the Command and Control/Cyber and Electronic Warfare Integration Division (C2CEWID). Review the references contained in Appendix A, *Professional Military Education*, to fully understand how to carry out your assignment. This handbook also contains the sources (websites) to help you locate current information, guidance, and procedures.

C2CEWID is staffed with Capabilities Integration Officers (CIOs) and Program Analysts. The roles and responsibilities of a CIO and Program Analysts include:

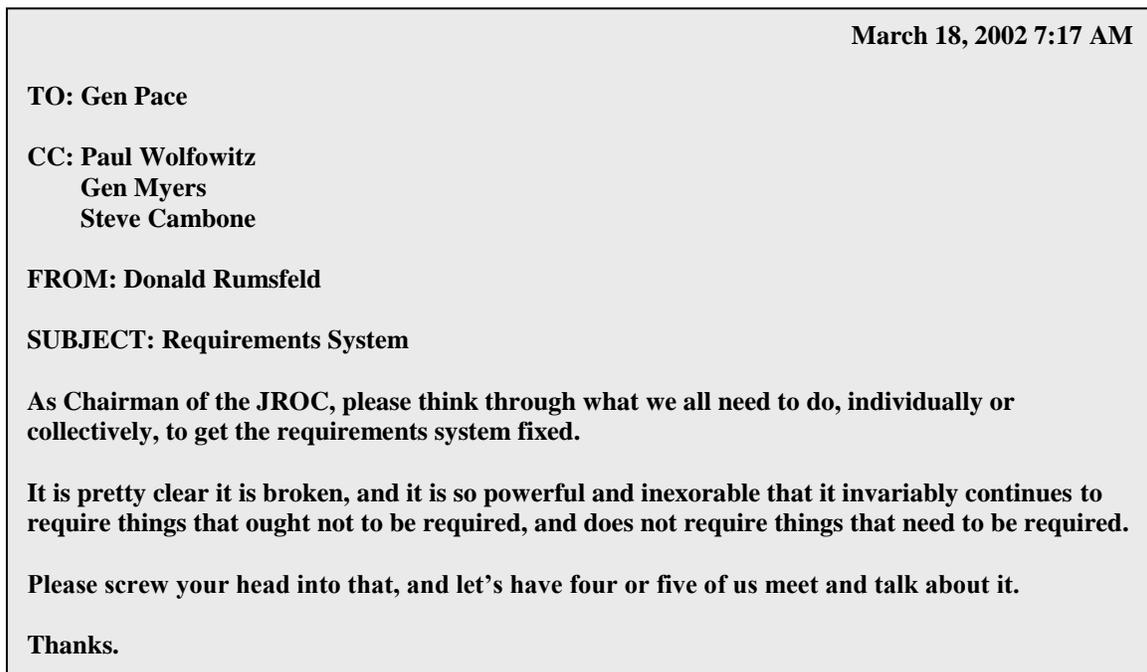
- Defining capabilities within your area of responsibility,
- Identifying gaps in your area of responsibility
- Assessing Universal Need Statements (UNS)/Urgent Universal Need Statements (UUNS), Operational Advisory Group (OAG) output, and validated lessons learned
- Recommending solutions to identified capability gaps and operational needs
- Taking appropriate staff action to close identified gaps and meet operational needs through doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P)
- Sustainment of existing capability in the form of program support and approved acquisition objective (AAO) reconciliation
- Managing resources and requirements trade space to support program management and Program Objective Memorandum (POM) delivery
- Requirements support throughout an assigned program's life-cycle

CIOs and Program Analysts develop and implement their analysis through *MCO 3900.15C, Marine Corps Capabilities Based Assessment System; CJCSI 3170.01H Joint Capabilities Integration and Development System; Manual for the Operation of JCIDS; DoD 5000.2 Defense Acquisition; SECNAVINST 5000.2E, DON Implementation and Operation of JCIDS and DAS; and MCO 3900.17, Urgent Needs Process.*

## 2. Why we do what we do

The first step in comprehending a capabilities-based approach to force development is learning why we have something called the Joint Capabilities Integration and Development System (JCIDS). Prior to 2002, DoD had a requirements process to determine needs, which was operated by the Joint Staff and featured the Joint Requirements Oversight Council (JROC) as the highest decision body. But, there was

widespread dissatisfaction with this process, as evidenced in the memo issued by the Secretary of Defense shown in Figure 1.



**Figure 1. Memo from the Secretary of Defense that began JCIDS**

A year later in April 2003 DoD's Transformation Planning Guidance was published. The highlights of this guidance were:

- Reform the acquisition process
- Capabilities-based resource allocation built around joint operating concepts
- DoD will now explicitly link acquisition to joint concepts in order to provide the capabilities necessary to execute future operations
- Transform from Service requirements and systems focus to a joint capabilities focus

Predictably, a considerable amount of activity followed, led by the decision to banish the word "requirement" from the new process. This effort resulted in three principles that form the foundation of JCIDS:

**Describe needs in terms of capabilities, instead of systems or force elements.** One of the major frustrations of the previous requirements processes was that solutions were introduced to the system without any higher-level rationalization. The intent was to replace statements such as "we need a more advanced fighter," with "we need the capability to defeat enemy air defenses." The latter statement provides the rationalization for needs, and also allows for competition among solutions.

**Derive needs from a joint perspective, from a new set of joint concepts.** The JCIDS architects recognized that a new set of documents would be necessary to link strategic ends to warfighting means. Furthermore, these documents would have to go beyond doctrine, which are beliefs about the best way to do things with existing resources. The joint concepts would have to challenge existing approaches and provide impetus for improvement. Also, these documents would broaden the strategic view and force the DoD to consider the needs of a variety of military problems, not just one or two canonical conflicts.

**Have a single general or flag officer oversee each DoD functional portfolio.** One problem with the existing requirements process was that no one organization had responsibility for knowing what DoD was doing in, for example, command-and-control systems. As a result, senior DoD decision makers became involved only after an unacceptably small set of options were defined. Now with JCIDS, each Functional Capability Board (FCB) is directed by a general or flag officer who has that responsibility.

By the summer of 2003, the Chairman of the Joint Chiefs of Staff initiated the Joint Capabilities Integration and Development System. The FCBs began functioning, and the production of joint concept documents began.

That transition was not straightforward or painless. CJCSI 3170.01, the governing instruction for JCIDS, was revised six times in its first three years. MCCDC has undergone the following transformations:

Warfighting Development Integration Division (WDID) with a Requirements Division staffed with Requirements Officers who used the Requirements Development System in 2002.

Expeditionary Force Development Center with a Materiel Requirements Division staffed with Materiel Requirements Officers who used an initial version of the Expeditionary Force Development System (EFDS) in 2003.

Capabilities Development Directorate in 2005 made up of Integrating Divisions (which align to the warfighting functions and Joint Staff FCBs) staffed with Capabilities Integration Officers who began to implement the revised capability-oriented version of EFDS in 2008.

In 2012 the “expeditionary” focus of EFDS began to change to a broader Marine Corps-wide “enterprise” focus and the concept of a Marine Corps Force Development System (MCFDS) began development.

During 2014 the Capabilities Development Directorate began to transition to a Capability Portfolio Management (CPM) approach with each Integration Division Director functioning as a Capability Portfolio Manager. The Capability Portfolio Manager’s role is evolving, but includes capabilities planning, resourcing, solution development, and performance measurement and assessment.

The debate regarding what exactly a capabilities-based approach is will continue; the best means for implementing CPM; which task structures should be used; the role of future planning scenarios and current operations plans; the role of architecture during analysis; and the exact relationship between JCIDS, the DoD Acquisition System (DAS), and the Planning, Programming, Budgeting and Execution (PPBE) process.

A Marine Corps enterprise-wide force development process governed through CPM and integrated with JCIDS is both ambitious and evolving. Functioning within these processes requires flexibility and adaptability. The key to being flexible and adaptable is for you to understand the intent of JCIDS and a capabilities-based approach to force development.

*Before we had individual Service analysis, solution development, and worried about joint interoperability after fielding. The focus was on identifying requirements for materiel.*

*Now, joint analysis, joint solution development and fielding are considered first. The focus is now on developing capabilities that have both a materiel and non-materiel dimension.*

### **3. How we do it**

The primary analysis method we use to define capabilities, identify gaps and recommend solutions is the Capabilities-Based Assessment (CBA). The *Manual for the Operation of the Joint Capabilities Integration and Development System, Enclosure A* defines the CBA process. The *Joint Staff J-8's Capabilities-Based Assessment (CBA) User's Guide* provides insight and additional recommendations for conducting a CBA. *MCO 3900.15C, Marine Capabilities Based Assessment*, defines the process for conducting a biannual Marine Corps-wide CBA.

In general a CBA consists of a description of the mission or military problem being assessed, the concepts to be examined, the timeframe, and scope of the assessment. The CBA results in three byproducts: a capabilities list, a gap list, and a list of recommended gap solutions.

The capabilities list is derived from analysis of future concepts and the conditions set in an approved CONOPS. The capabilities list includes all of the tasks, conditions, and standards required to affect the desired capabilities.

The gap list is derived by analyzing the way we are manned, trained and equipped to operate today (doctrine) against standards in the capabilities list which represent the way we intend to operate in the future (concepts).

Lastly, the CBA identifies specific non-materiel solutions and recommendations for materiel approaches to fill the identified gaps by analyzing each gap through a doctrine, organization, training, materiel, leadership and education, personnel, and facilities and policy (DOTMLPF-P) methodology. Materiel approaches fall into three main categories:

development of information systems; evolution of existing systems; and/or breakout systems (transformational initiative).

The Marine Corps force development process requires CD&I to conduct a Marine Corps-wide CBA every two years and a review every other year with each Integration Division/Capability Portfolio Manager representing their respective capability area. The capabilities list and gap list resulting from this process are validated by DC, CD&I. Solution recommendations are validated by the Integration Division Director/CPM. For the purposes of joint integration and support for the Defense Acquisition System (DAS) process, the results of a CBA are summarized, staffed and validated in an Initial Capabilities Document (ICD). See the *Manual for the Operation of JCIDS, Enclosure B* for specific ICD details.

Ideas for non-materiel solutions to identified gaps that are validated in the ICD and require Joint Staff action are documented and staffed in a Joint DOTMLPF Change Recommendation (DCR) (see the *Manual for the Operation of JCIDS, Enclosure B*). A Joint DCR may be generated without a preceding ICD, but must include the appropriate detail of an ICD with respect to the identified capability requirements and associated gaps.

Ideas for non-materiel solutions to identified gaps that are validated in the ICD and only require Service level action are documented and staffed in accordance with applicable Service level directives. See the guidance provided in the respective DOTMLPF-P sections of this handbook for details. Service level non-materiel solution staff action can be initiated without a preceding ICD by using the DC, CD&I validated gap list from the Marine Corps force development process as supporting rationale.

Materiel approach(s) recommended in the ICD along with Analysis of Alternatives (AOA) Study Guidance are presented to a Milestone Decision Authority (MDA) for a Materiel Development Decision (MDD). The MDD is the formal entry point into the acquisition process and is mandatory for all programs. The MDD is typically followed by an AOA collaboratively conducted by Marine Corps Systems Command (MCSC), the Operations Analysis Division (OAD) of MCCDC and the respective Integration Division. See *MOA Establishment of a standing AOA Integrated Product Team for Acquisition Category III and IV Programs* for more details on initiating an AOA. Following the AOA the MDA will identify the materiel alternative that is the best solution for filling an identified gap in a capability and the subsequent milestone (MS) and respective phase: A – Technology Development Phase, B – Engineering and Manufacturing Development Phase, or C – Production and Deployment Phase. The CIO or Program Analyst will then charter an Integrated Product Team and develop a Concept of Employment for the materiel solution followed by the development of a Capability Development Document (CDD) to support a Milestone B decision and/or Capability Production Document (CPD) to support a Milestone C decision; Statement of Need (SON) in lieu of a CDD or CPD in the case of an abbreviated acquisition program; or Operations & Organization (O&O) Concept in cases where we want to leverage another Service's program initiatives.

CIOs and Program Analysts also assess Universal Need Statements (UNS) and Urgent Universal Need Statements (UUNS) from the operating forces. An UNS enters into Marine Corps force development process during the gap analysis phase and is analyzed for a solution and competes for funding with all of the other solutions to identified gaps. An UUNS and its derived solution bypass the routine Marine Corps force development process and are staffed to the Marine Corps Requirements Oversight Counsel (MROC) for validation and resourcing approval. The CIO or Program Analyst will then be required to develop a CDD, CPD, SON, or O&O Concept for a materiel solution and/or initiate appropriate staff action for a non-materiel solution.

Any organization solution recommendations or materiel solution alternatives that are selected for development must be fully assessed for the DOTMLPF-P and cost implications for implementing that solution. This DOTMLPF-P and cost assessment is an integral part of the Total Force Structure Process (see *MCO 5311.1D, Total Force Structure Process* for more details) and CDD/CPD development and documentation (see the *Manual for the Operation of JCIDS, Enclosure B*).

Terms to be familiar with:

**Initial Capabilities Document (ICD)** - An ICD documents one or more new capability requirements and associated capability gaps. The ICD also documents the intent to partially or wholly address identified capability gap(s) with a non-materiel solution, materiel solution, or some combination of the two.

**Joint DOTmLPF Change Request (DCR)** - A Joint DCR documents the intent to partially or wholly address an identified capability requirement and associated capability gap with a non-materiel solution, recommending changes to existing capabilities of the Joint force in one or more of the eight DOTMLPF-P areas. In cases where a Joint DCR is not generated from an ICD, it also serves to document the new capability requirements and associated capability gaps being addressed. The letter “m” in the acronym is usually lower case since Joint DCRs do not advocate new materiel development, but rather advocate increased quantities of existing materiel capability solutions or use in alternate applications.

**Capability Development Document (CDD)** - A CDD defines authoritative, measurable, and testable parameters across one or more increments of a materiel capability solution, by setting Key Performance Parameters (KPPs), Key System Attributes (KSAs), and additional performance attributes necessary for the acquisition community to design and propose systems and to establish programmatic baselines.

**Capability Production Document (CPD)** - A CPD provides authoritative, testable capability requirements, in terms of KPPs, KSAs, and additional performance attributes, for the Production and Deployment phase of an acquisition program, and is an entrance criteria item necessary for each MS C acquisition decision.

**Letter of Clarification (LOC)** – A LOC provides program managers clarification on identified requirements found in the requirements documents of a material solution. The LOC can modify threshold and objective requirements, provide relief from non-key performance parameter requirements, or provide amplifying information to further describe requirements.

**Statement of Need (SON)** – A SON is prepared by the CIO in lieu of a JCIDS capabilities document (ICD, CDD, or CPD) to define the materiel attributes for a capability that because of its projected cost, will meet the requirements for an Abbreviated Acquisition Program (AAP), or due to an unusual and compelling urgency (i.e. war), when traditional JCIDS documentation would be unresponsive to the current operational need.

**Universal Need Statement (UNS)** – The UNS is designed to act as a “work request” for current and future desired capabilities. Advocates, the operating forces, or the supporting establishment can generate an UNS. The UNS articulates needs by identifying operational enhancements, opportunities, and deficiencies. Opportunities may include new capabilities, improvements to existing capabilities, and elimination of redundant or unneeded capabilities that may be addressed during the gap analysis phase of the force development process.

**Urgent Universal Need Statement (UUNS)** – The UUNS is an exceptional request from a combatant command-level Marine component commander for an additional warfighting capability that is critically needed by operating forces conducting combat or contingency operations. Failure to deliver the capability requested by the Urgent UNS is likely to result in the inability of units to accomplish their missions or risks increased probability of casualties and loss of life.

Key references and resources worth saving as “favorites:”

#### **References**

CJCSI 3170.01H, *Joint Capabilities Integration and Development System Manual for the Joint Capabilities Integration and Development System*  
(<https://www.intelink.gov/wiki/JCIDS>)

SECNAVINST 5000.2E, *Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System*

*DON Acquisition and Capabilities Guidebook*

*Joint Staff J-8's Capabilities-Based Assessment (CBA) User's Guide* (see KM/DS website for latest version)

*JROC Administrative Guide* (see KM/DS website for latest version)

MARCORSYSCOM Acquisition Guidebook, Nov 2013

## Resources

Appendix A, Professional Military Education

Appendix B, Concept of Employment

Appendix C, CDD/CPD Development Matrix

Appendix D, Integrated Product Team Guidelines

Joint Staff J-7, *Joint Doctrine, Education & Training Electronic Information System (JDEIS)* website: <https://jdeis.js.mil/jdeis> or on SIPRNET at: <https://jdeis.js.smil.mil>

This website is the best single source reference in the CIO and Program Analyst's arsenal. No staff member knows all the answers, but all C2CEWID personnel should know where to find them. This website is the place to find the answers. From this site you have access to all Joint, Multi-Service and Service level doctrine and other valuable references such as the Dictionary for military terms and acronyms. The site also provides access to the family of Joint Concepts as well as the Joint Capability Area lexicon and taxonomy. Additionally, the site links to all CJCS instructions and manuals as well as all DoD orders and instructions.

*JCIDS Manual* website: [https://intellipedia.intelink.gov/wiki/JCIDS\\_Manual](https://intellipedia.intelink.gov/wiki/JCIDS_Manual):

Source for the latest version of *CJCSI 3170.01, Joint Capabilities Integration and Development System; Manual for the Operations of JCIDS*; alternative JCIDS document formats; and information on the Knowledge Management and Decision System (KM/DS).

*Knowledge Management/Decision Support (KMDS)* website:

<https://jrockkmdsbpm.js.smil.mil/>

Electronic Joint staffing tool and repository for all JCIDS documents.

Defense Acquisition University Virtual Campus: <https://learn.dau.mil/>

Source to find answers for all Defense Acquisition System questions.

Defense Acquisition University Glossary may be found at

<https://dap.dau.mil/glossary/Pages/Default.aspx>.

A complete glossary of acquisition terms and common acquisition acronyms.

Acronym Finder: <http://www.acronymfinder.com>

Source for all other acronyms not found in the DoD Dictionary or the DAU Glossary.

## 4. DOTMLPF-P

In a capabilities-based approach to force development the DOTMLPF-P methodology is applied at two distinct times during the process. DOTMLPF-P is first applied during the

CBA to help determine materiel and non-materiel solutions to the identified capability gaps. DOTMLPF-P is then applied a second time to determine the implications for implementing Organization, Personnel or Materiel solutions. For Organization and Personnel solutions the DOTMLPF-P implications are documented as part of the Total Force Structure Management System process. For Materiel solutions the DOTMLPF-P implications are documented in a Capability Development Document (CDD) and/or Capability Production Document (CPD) as part of the JCIDS process. Understanding the DOTMLPF-P methodology is essential for being able to effectively conduct capabilities development. Any given “capability requirement” is manifested through one or more elements of DOTMLPF-P. Consider the following capability definitions and the potential deliverables in Figure 3.

**Capability** – The ability to execute a specified course of action.

**Capability Requirement (or Requirement)** – A capability which is required to meet an organization’s roles, functions, and missions in current or future operations. To the greatest extent possible, capability requirements are described in relation to tasks, standards, and conditions in accordance with the Universal Joint Task List or equivalent DoD Component Task List.

**Capability Gap (or Gap)** – The inability to execute a specified course of action. The gap may be the result of no existing capability, lack of proficiency or sufficiency in an existing capability solution, or the need to replace an existing capability solution to prevent a future gap.

**Capability Solution** – A materiel solution or non-materiel solution to satisfy one or more capability requirements (or needs) and reduce or eliminate one or more capability gaps.

<b><u>Capability List</u></b>	<b><u>Gap List</u></b>	<b><u>Solution Analysis</u></b>	<b><u>Staff Action</u></b>	<b><u>Deliverable</u></b>
		D	<b>Pub Development Order</b>	Doctrinal Pubs
		O DOTMLPF-P	<b>TOECR</b>	T/O
		T	<b>Training Proposal</b>	T&R
		M DOTMLPF-P	<b>CDD/CPD</b>	POR
<b>Capability →</b>	<b>Gap →</b>	L	<b>Education Proposal</b>	POI
		P	<b>MOS Proposal</b>	MOS
		F	<b>I&amp;L Proposal</b>	MILCON
		P	<b>Policy Proposal</b>	MCO

**Figure 3. Capability – Gap – Solution - Deliverable**

Intentionally Blank

## Doctrine

**Definition** - Fundamental principles that guide the employment of US military forces in coordinated action toward a common objective. Though neither policy nor strategy, doctrine serves to make US policy and strategy effective in the application of US military power. Doctrine is based on extant capabilities. Doctrine is authoritative guidance and will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise (*Manual for the Operation of JCIDS*).

### Things you need to know about Marine Corps doctrine...

The Marine Corps doctrinal hierarchy consists of:

**MCDP** (8 year revision cycle) *Fundamental beliefs/guiding principles of warfighting*

**MCWP** (4 year revision cycle) *Focused subject matter, tactics, techniques and procedures (TTPs)*

**MCRP** (4 year revision cycle) *Information on a particular system or function*

**MCWIP** (2 year revision cycle) *Immediate response to current threats*

All of the publications in the Marine Corps doctrinal hierarchy are assigned to a respective Integration Division for custodian and staffing support. Each publication is also assigned a Proponent to provide SME support during a publication's revision process. The MAGTF Integration Division (MID), Doctrine Control Branch (DCB) provides publishing support (professional editors, terminologist, graphic artist). MCBul 5603 designates publication Custodial and Proponent responsibility for the respective Integration Division and supporting establishment command Proponent.

The Integrating Divisions guide their doctrine publication revision and/or development process and coordinate Proponent support by issuing a Publication Development Order (PDO). The below references and resources define the process, and the roles and responsibilities of the Custodian, the Proponent, and DCB for revising an existing publication and/or developing a new publication.

### References:

MCO 5600.20M, Marine Corps Warfighting Publication System

MCO 5600.49, Marine Corps Doctrinal Proponency

MCBul 5603, Marine Corps Doctrinal Proponency Assignments

**Resources:**

Joint Staff, J-7's Joint Electronic Library (JEL) – <http://www.dtic.mil/doctrine/>

Marine Corps Doctrine Website – <https://www.doctrine.usmc.mil/>

Marine Corps Center for Lessons Learned – <https://www.mccll.usmc.mil/>

Training and Education Command (TECOM) – <http://www.tecom.usmc.mil/>

<p style="text-align: center;"><b>During the CBA</b></p>
--

**Evaluating Doctrine as a solution to an identified gap:**

Is there existing doctrine or procedures that address the gap at the joint, multi-service, service, or agency level?

Conduct a review of the joint, multi-service, and Marine Corps doctrinal hierarchies. Also, through the JS J-7, Air Land Sea Application (ALSA) Center, and Marine Corps doctrine websites/POCs identify and assess doctrinal publications that may be in revision or development.

Are there procedures in place that are not being followed that would eliminate or mitigate the gap?

Review Marine Corps Center for Lessons Learned: Communities of Practice, Observations & Recommendations, and the Lessons Learned Library.

Coordinate this assessment with the Training and Education Command (TECOM).

Can new doctrine or procedures be developed that will provide a partial or full solution to the gap?

<p style="text-align: center;"><b>Following CBA and/or ICD validation</b></p>
---

**Implementing Doctrine as a solution to an identified gap:**

If the doctrinal solution involves developing or revising a Joint doctrinal publication, then submit a Joint DCR in accordance with the *Manual for the Operation of JCIDS, Enclosure B*.

If the doctrinal solution involves developing and revising a Marine Corps doctrinal publication:

- 1) Go to the Marine Corps Doctrine website.
- 2) Click on “Proponents/Reviewers,” then click on “Proponent’s Tool Box.

- 3) Follow the guidance in the Proponent's Tool box to develop or revise a Marine Corps doctrinal publication.

<b>During CDD/CPD development</b>
-----------------------------------

**Analyzing Doctrine implications as part of implementing a materiel solution:**

Conduct a review of the publications in the joint, multi-service, and Marine Corps doctrinal hierarchies related to the materiel solution. Identify publications affected by the development of this solution. Determine the revision dates of these publications. Compare these revision dates to the IOC/FOC dates of the materiel solution. Determine if early revision is warranted. If there are no doctrinal publications that address this solution, determine if development of a new doctrinal publication is necessary. Document the results of this assessment in section 14 of the CDD. Following the EMD phase of the acquisition process, update this assessment and document it in section 14 of the CPD. Following a Milestone B acquisition decision, initiate the appropriate staff action to develop/revise a doctrinal publication(s) as required:

- 1) Go to the Marine Corps Doctrine website.
- 2) Click on "Proponents/Reviewers," then click on "Proponent's Tool Box.
- 3) Follow the guidance in the Proponent's Tool box to develop or revise a Marine Corps doctrinal publication.

Intentionally Blank

## Organization

**Definition** - A unit or element with varied functions enabled by a structure through which individuals cooperate systematically to accomplish a common mission and directly provide or support warfighting capabilities. Subordinate units and elements coordinate with other units and elements and, as a whole, enable the higher-level unit or element to accomplish its mission. This includes the staffing (military, civilian, and contractor support) required to operate, sustain, and reconstitute warfighting capabilities (*Manual for the Operation of JCIDS*).

### References:

MCO 5311.1D, Total Force Structure Process

MCBul 5400 series (unit mission statements)

### Resources:

Total Force Structure Management System (TFSMS) - <https://tfsms.mccdc.usmc.mil/>

### During the CBA

#### **Evaluating Organization as a solution to an identified gap:**

Will organizational changes at any level eliminate or mitigate the gap?

Conduct an organizational assessment by following the guidance in *MCO 5311.1D, Total Force Structure Process*. Coordinate this effort with CDD, Total Force Structure Division (TFSD).

### Following CBA and/or ICD validation

#### **Implementing Organizational changes as a solution to an identified gap:**

If the organizational solution involves a Joint related organization issue, submit a DCR in accordance with *Manual for the Operation of JCIDS*, Enclosure B.

For Marine Corps organizational solutions follow the guidance in *MCO 5311.1D, Total Force Structure Process*. Coordinate this effort with CDD, Total Force Structure Division (TFSD).

### During CDD/CPD development

#### **Analyzing Organizational implications as part of implementing a materiel solution:**

Assess the organizational implications of implementing a materiel solution by following the guidance in *MCO 5311.1D, Total Force Structure Process*. Coordinate this effort through the IPT and CDD, Total Force Structure Division (TFSD). Document this analysis in section 14 of the CDD/CPD.

Intentionally Blank

## Training

**Definition** - Training, including mission rehearsals, of individuals, units, and staffs using doctrine or tactics, techniques, and procedures to prepare forces or staffs to respond to strategic, operational, or tactical requirements considered necessary by the CCMDs to execute their assigned or anticipated missions (*Manual for the Operation of JCIDS*).

### References:

NAVMC 1553.1, Systems Approach to Training User's Guide  
NAVMC 3500 series Training & Readiness Manual  
MCO 3500.110, Policy and Guidance for METL Development  
MCO 1553.2B, Management of Marine Corps formal Schools and Training Detachments

### Resources:

Training and Education Command (TECOM) – <http://www.tecom.usmc.mil/>

### During the CBA

#### **Evaluating Training as a solution to an identified gap:**

What changes to training (access, proficiency, staffing, funding) will either eliminate or mitigate the gap?

Coordinate this assessment with Training and Education Command (TECOM) G-3.

TECOM G-3 will coordinate with the Integration Division to identify and analyze potential changes in any portion of DOTMLPF-P that might impact related training and education. The G-3 will ensure that appropriate staff sections of TECOM are proactively engaged in shaping these changes via the Marine Corps force development process. The staff sections will ensure that TECOM G-3 is kept informed of all working groups they participate in and that all results and recommendations are appropriately staffed to all TECOM sections/organizations.

### Following CBA and/or ICD validation

#### **Implementing Training changes as a solution to an identified gap:**

Coordinate training initiatives with the respective TECOM staff section and TECOM G-3.

### During CDD/CPD development

#### **Analyzing Training implications as part of implementing a materiel solution:**

Coordinate this assessment and implementation of training related requirements with the respective TECOM staff section and TECOM G-3. Document this analysis in section 14 of the CDD/CPD.

Intentionally Blank

## **Materiel**

**Definition** - All items (including ships, tanks, self-propelled weapons, aircraft, etc., and related spares, repair parts, and support equipment, but excluding real property, installations, and utilities) necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes (*Manual for the Operation of JCIDS*).

*Note: Materiel vs. Material - In the context of what we do as it relates to the JCIDS process the term we use is “materiel” (equipment and supplies of a military force) – not “material” (the substance out of which a thing is made).*

### **References:**

CJCSI 3170.01H, Joint Capabilities Integration and Development System

Manual for the Operation of JCIDS - [https://intellipedia.intelink.gov/wiki/JCIDS\\_Manual](https://intellipedia.intelink.gov/wiki/JCIDS_Manual)

CJCSI 6212.01E, Net Ready Key Performance Parameter (NR KPP)

CJCSI 3312.01B, Joint Military Intelligence Requirements Certification

SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System

DON Acquisition and Capabilities Guidebook

JROC Administrative Guide (see KMDS website for latest version)

### **Resources:**

Joint Staff, J-7’s Joint Doctrine, Education & Training Electronic Information System (JDEIS) – <https://jdeis.js.mil/jdeis/index.jsp>. See Appendix E, Navigating the Joint Staff J-7 Website for details.

Knowledge Management and Decision Support (KMDS) - <https://jrockkmdsbpm.js.smil.mil/>

Capabilities Development Directorate (CDD) Handbook – Support Center on the Division SharePoint site

<b>During the CBA</b>
-----------------------

### **Evaluating Materiel as a solution to an identified gap:**

Is the gap caused by an inadequate system, equipment and/or quantities?

Can any of the systems, system of systems (SOS) or family of systems (FOS) satisfy the gap?

What increase in performance will be needed to fill the gap?

Can increases in performance be achieved without a new system (product improvements to existing materiel, adoption of other services, interagency or foreign materiel approaches)?

Is a new materiel start required to fill the gap (i.e. development of a brand new system, service or application)?

**Following ICD validation, AOA and Milestone decision**

**Implementing Materiel changes as a solution to an identified gap:**

Develop a CDD and/or CPD as required in accordance with the *Manual for the Operation of JCIDS*. Develop and lead an Integrated Product Team (IPT) responsible for producing the various sections of the CDD/CPD. See the Appendix D, IPT Guidelines for direction on establishing/chartering an IPT. See Appendix C for a sample CDD/CPD development matrix.

**During CDD/CPD development**

**Analyzing Materiel implications as part of implementing a materiel solution:**

Even a materiel approach to an identified gap can create other collateral materiel implications. Consideration should be given to factors such as logistics, spare parts, fuel supply, support equipment, disposal, installation, configuration management, etc. Document this analysis in section 14 of the CDD/CPD in order to initiate and guide the necessary staff action to support the development and deployment phase of the acquisition process.

Intentionally Blank

## Leadership and Education

**Definition** - Professional development of the leader is the product of a learning continuum that comprises training, experience, education, and self-improvement. The role of professional military education is to provide the education needed to complement training, experience, and self-improvement to produce the most professionally competent individual possible (*Manual for the Operation of JCIDS*).

### References:

NAVMC 1553.1, Systems Approach to Training User's Guide  
NAVMC 3500 series Training & Readiness Manual  
MCO 3500.110, Policy and Guidance for METL Development  
MCO 1553.2B, Management of Marine Corps formal Schools and Training Detachments

### Resources:

Training and Education Command (TECOM) – <http://www.tecom.usmc.mil/>

### During the CBA

#### **Evaluating Leadership and Education as a solution to an identified gap:**

Can any changes in leadership and education fill or mitigate the gap?

Coordinate this assessment with the respective TECOM staff section and TECOM G-3.

TECOM G-3 will coordinate with the Integration Division to identify and analyze potential changes in any portion of DOTMLPF-P that might impact related training and education. The G-3 will ensure that appropriate staff sections of TECOM are proactively engaged in shaping these changes via the Marine Corps force development process. The staff sections will ensure that TECOM G-3 is kept informed of all working groups they participate in and that all results and recommendations are appropriately staffed to all TECOM sections/organizations.

### Following CBA and/or ICD validation

#### **Implementing Leadership and Education changes as a solution to an identified gap:**

Coordinate training initiatives with the respective TECOM staff section and TECOM G-3.

### During CDD/CPD development

#### **Analyzing Leadership and Education implications as part of implementing a materiel solution:**

Coordinate this assessment and implementation of leadership and education related requirements with the respective TECOM staff section and TECOM G-3. Document this analysis in section 14 of the CDD/CPD.

Intentionally Blank

## Personnel

**Definition** - The personnel component primarily ensures that qualified personnel exist to support joint capability requirements. This is accomplished through synchronized efforts of joint force commanders and DoD components to optimize personnel support to the joint force to ensure success of ongoing peacetime, contingency, and wartime operations (*Manual for the Operation of JCIDS*).

**References:**

MCO 1200.15C, MOS System Modification Process

MCO 1200.17E, MOS Manual

**Resources:**

Training Command (TRNGCOM) – <http://www.tecom.usmc.mil/>

<b>During the CBA</b>
-----------------------

**Evaluating Personnel as a solution to an identified gap:**

Is the gap caused by a lack of trained and qualified personnel?

Will changes to the number of personnel, skill levels or types of personnel either fill or mitigate the gap?

<b>Following CBA and/or ICD validation</b>
--

**Implementing Personnel changes as a solution to an identified gap:**

CG, Training Command (TRNGCOM) is the single point of contact for submitting all requests for MOS system changes. MOS system modifications result from changes to organizational requirements, identification of new or additional skill requirements, or as an outcome of the Marine Corps Front-End Analysis (FEA) Process. It is important to note that requests to change the MOS Manual are separate from T/O change requests (TOECR). However, MOS Manual changes that also require a change to the T/O must be submitted separately to CG TRNGCOM after the T/O change request has been fully developed by Director, Total Force Structure Division (TFSD). An identical TOECR as provided to TFSD must also be included in requests for MOS Manual revision to CG, TRNGCOM.

<b>During CDD/CPD development</b>
-----------------------------------

**Analyzing Personnel implications as part of implementing a materiel solution:**

Coordinate this assessment with CG, Training Command point of contact. Document this analysis in section 14 of the CDD/CPD.

Intentionally Blank

## Facilities

**Definition** - Real property consisting of one or more of the following: buildings, structures, utility systems, associated roads and other pavements, and underlying land (*Manual for the Operation of JCIDS*).

**References:**

MCO P11000.12C W/CH 1, Real Property Facilities Manual, Volume II, Facilities Planning and Programming

**Resources:**

Headquarter Marine Corps, Installations and Logistics (I&L) - <http://www.iandl.marines.mil/>

<b>During the CBA</b>
-----------------------

**Evaluating Facilities as a solution to an identified gap:**

Is the gap caused by aging or worn out infrastructure?

Is the gap caused by inadequate facilities?

<b>Following CBA and/or ICD validation</b>
--

**Implementing Facilities changes as a solution to an identified gap:**

Facilities recommendations for identified gaps should be documented, staffed and coordinated with HQMC I&L, Facilities Branch in accordance with MCO P1100.12C.

<b>During CDD/CPD development</b>
-----------------------------------

**Analyzing Facilities implications as part of implementing a materiel solution:**

Coordinate this assessment with HQMC I&L, Facilities Branch point of contact.

Intentionally Blank

## Policy

**Definition** - Policy consists of published orders, directives, instructions, manuals, and publications from DoD, CJCS, and HQMC.

**References:**

HQMC Plans, Policy and Operations

**Resources:**

Joint Staff J-7, Joint Doctrine, Education & Training Electronic Information System (JDEIS) website: <https://jdeis.js.mil/jdeis> or on SIPRNET at: <https://jdeis.js.smil.mil>  
Provides access to all CJCS Instructions and Manuals, and DoD Orders and Instructions.

Marine Corps Home Page - <http://www.hqmc.marines.mil/>

Provides access to all Marine Corps Orders, Publications, Manuals, and Bulletins

<b>During the CBA</b>
-----------------------

**Evaluating Policy as a solution to an identified gap:**

Is the gap caused by an outdated policy?

Is the gap a result of a lack of policy or clear guidance?

<b>Following CBA and/or ICD validation</b>
--

**Implementing Policy changes as a solution to an identified gap:**

Policy recommendations to fill or mitigate identified gaps should be documented, staffed and coordinated with the appropriate HQMC staff section.

<b>During CDD/CPD development</b>
-----------------------------------

**Analyzing Policy implications as part of implementing a materiel solution:**

Policy implications from implementing a materiel solution should be documented, staffed and coordinated with HQMC. Document this analysis in section 14 of the CDD/CPD.

Intentionally Blank

## APPENDIX A

### Professional Education

*“The best kind of discipline is self-discipline – make time to read.”*

Below is a professional education regiment to educate you on the force development process and develop an understanding of the Marine Corps’ contribution to Joint warfighting, how we operate today (doctrine), and how we intend to operate in the future (concepts). Many of these references have executive summaries and detailed tables of contents. The intent is not to read and memorize all these documents, but rather to become familiar with their content so you can effectively refer back to them when needed.

#### **Week 1:**

Capabilities Development Directorate Handbook  
CJCSI 3170.01H, Joint Capabilities Integration and Development System  
Manual for the Operation of the Joint Capabilities Integration and Development System\*

#### **Week 2:**

DoDI 5000.02, Operation of the Defense Acquisition System\*  
SECNAVINST 5000.2E, Implementation of DAS and JCIDS \*  
MCO 3900.15C, Marine Corps Capabilities Base Assessment \*  
DON Acquisition and Capabilities Guidebook

#### **Week 3:**

MCO 3900.17, Marine Corps Urgent Needs Process  
MCO 5311.1D, Total Force Structure Process  
MCO 3500.110, Policy and Guidance for METL Development  
MCO 5311.6, Advocate and Proponent Assignments and Responsibilities

#### **Week 4:**

The Joint Operating Environment 2010  
Capstone Concept for Joint Operations: Joint Force 2020  
Naval Operations Concept 2010  
Expeditionary Force 21\*

#### **Week 5:**

Joint Publication 3-0, Joint Operations  
Joint Publication 6-0, Joint Communications  
MCDP 1-0, Marine Corps Operations

#### **Week 6:**

Operational Architecture Process and Product Guide  
Letter of Instruction for USMC JCIDS SMEs\*

\* Should have a copy of this document for desktop reference.

## **Functional Area Professional Education**

### **Command and Control**

JP 3-30, Command and Control of Joint Air Operations

JP 3-31, Command and Control of Joint Land Operations

JP 3-32, Command and Control of Joint Maritime Operations

JP 3-33, Joint Task Force Headquarters

MCDP 6, Command and Control

MCWP 3-40.1, MAGTF Command and Control

Marine Corps Functional Concept for Command and Control

Common Tactical Picture Enabling Concept, Version 1, November 2012

MAGTF Command and Control Systems Concept of Operations

MAGTF Command and Control ICD

Information System-ICD for Tactical Service Oriented Architecture

FY-13 MAGTF C2 Roadmap

2014 Command Element Roadmap

MCO 3090.2, Policy for Marine Air-Ground Task Force Command and Control Integration and Interoperability

### **Cyberspace Operations**

Joint Concept for Cyberspace

USMC Cyberspace Concept

Cyber and Electronic Warfare Coordination Cell Concept

JP 3-12, Cyberspace Operations

Marine Corps Cyberspace Operations CBA

Marine Corps Cyberspace Operations ICD with Attachment 1

SECNAVINST 3052.2, Cyberspace Policy and Administration

MCO 5230.21, Information Technology Portfolio Management

MCO 5239.2A, Marine Corps Cybersecurity Program

### **Electronic Warfare**

A Concept for Marine Air Ground Task Force Electronic Warfare 2020

Marine Air Ground Task Force Electronic Warfare Concept of Operations

JP 3-13.1, Electronic Warfare

JP 6-01, Joint Electromagnetic Spectrum Management Operations

MCWP 3-40.5, Electronic Warfare

CJCSM 3320.01C, Joint Electromagnetic Spectrum Management Operations in the Electromagnetic Operational Environment

MCO 3430.2b, Policy for Electronic Warfare

MCO 2400.2A, Marine Corps Management and Use of the Electromagnetic Spectrum

Electronic Warfare ICD

ICD for Marine Air Ground Task Force Electronic Warfare

### **Routine Professional Education**

Go to the *Marine Center for Lessons Learned* (<https://www.mccll.usmc.mil/>) and register for automatic distribution of the “*Weekly New Data*.”

Go to the *Knowledge Management and Decision Support (KMDS)* at: <https://jrockkmdsbpm.js.smil.mil/> on a routine basis to review the latest JROC memos in order to stay aware of changes to the JCIDS process, development of other Joint and Service analysis, and materiel and non-materiel solution development.

Go to the *Defense Acquisition Guidebook* at: <https://dag.dau.mil/Pages/Default.aspx> whenever you have questions about acquisition policy and/or best practices.

Intentionally Blank

## APPENDIX B

### Concept of Employment

#### 1. Introduction

The CIO or Program Analyst prepares and submits a Concept of Employment (COE) to document information that is required to support CDD/CPD/SON development and Total Force Structure Division (TFSD) requirements. The COE is not a JCIDS document, but is required by SECNAVINST 5000.2E and MCO 5311.1D. The COE is not the CONOPS mentioned in the *Manual for the Operation of JCIDS* regarding the CBA. The CONOPS that supports CBA analysis is an operational overview that provides the context and sets the conditions to determine tasks and standards of performance. The COE is the concept for employing the materiel solution that was selected during the Milestone decision to fill the gap(s) identified during the CBA and documented in the ICD. The COE helps to define the materiel solution from an employment perspective (i.e. how much, how far, how fast, who is going to use it, etc.). The information in the COE along with the information from the Capability Requirement and Gap Description Table in the ICD and results of the AOA become the reference points for development of the Key Performance Parameters (KPPs), Key System Attributes (KSAs), and other performance attributes documented in the CDD/CPD.

2. **Format.** The format depicted on the following page is required for all Marine Corps-developed COEs.

a. Each subparagraph should be numbered to facilitate requirements correlation and traceability, and for ease of identifying issues during staffing. Use the standard method of numbering (1., 1.a, 1.a.(1), 1.b, 1.b.(1), etc).

b. COEs must be submitted in MS-Word (6.0 or greater) format.

c. Architecture products, if required, shall be embedded into the MS-Word file for ease of review during the staffing process. Under most circumstances, architecture products will not be required, but if one is required, an OV-1 is all that should be necessary.

d. All COEs must clearly be labeled with draft version number, increment and date, and include any caveats regarding releasability, even if unclassified. The intent is to share COEs with allies and industry wherever possible. Paragraphs that contain non-releasable information (allies or industry) will be indicated as "*Not releasable outside the DoD.*"

e. The goal for each COE is to be as short and concise as possible.

CLASSIFICATION

USMC COE [Title](#)

[Submitted by](#) \_\_\_\_\_

[Date](#)

[Releasability Instructions](#)

Points of Contact

Table of Contents

1. [Introduction.](#)

- a. Purpose
- b. Scope

2. [Mission.](#)

3. [Threat.](#)

- a. General
- b. System Vulnerability

4. [Description.](#)

- a. System Description
- b. System Relationship and Interoperability
- c. Equipment Replaced
- d. Capability Increase

5. [Organization.](#)

- a. System Location/Distribution
- b. Personnel Requirements
- c. Organizational Structure Requirements
- d. Mission Requirements/Tactical Structure

6. [Training.](#)

- a. New Skills/Training Requirements
- b. Training Methods and Location

7. [Operational Employment.](#)

- a. Methods of Employment
  - b. Employment Prerequisites
  - c. Mission Planning Factors
  - d. Mission Execution Factors
  - e. Control
  - f. Frequency, Assignment and Use
  - g. Security
  - h. Mobility/Transportability
  - i. Safety
  - j. Sustainment
8. [Mission Effectiveness Criteria](#)
9. [Appendices](#)

**Figure B-1. COE Format**

f. Draft documents will be submitted with line numbers displayed.

g. Do not use photos, symbols, or logos on the front page; as part of the title page; or, unless essential to describing the background, the capability or the analysis, other locations throughout the document.

h. Appendices listed in this guide must be included with the COE.

**3. Preparation.** Following are detailed instructions for preparing the COE.

### **Section I**

**Document Heading.** This heading information will be placed in the middle, center of the first page of the COE.

**Classification** – state the classification of the document, if unclassified, so state. If classified, state the appropriate classification (Confidential, Secret, Top Secret) and ensure the remainder of the document is marked.

**Title** – insert the name of the capabilities described in the COE.

**Submitted By** – insert the name of the division.

**Date** – enter the date the COE was signed by the last approving directorate. For documents in staffing, use the date the COE was released for staffing by the division. Include the draft version (for example "Draft version 1.0, Date\_\_\_\_\_"). Remove the draft version identification marking once the document is approved and enter the approval date.

### **Releasability Instructions**

- a. Classified Documents. Enter the appropriate releasability statement.
- b. Downgrading Instructions (if appropriate).
- c. Unclassified Documents. Enter one of the following statements:
  - (1) Statement A: Approved for public release; distribution unlimited.
  - (2) Statement B: Distribution authorized to U.S. Government agencies only.
  - (3) Statement C: Distribution authorized to U.S. Government agencies and their contractors only.
  - (4) Statement D: Distribution authorized to the DoD and DoD Contractors only.
  - (5) Statement E: Distribution authorized to DoD components only.
  - (6) Statement F: Further dissemination only as directed by (office symbol) or higher authority.
  - (7) Statement X: Distribution authorized to U.S. Government agencies and private individuals or enterprises eligible to obtain export-controlled technical data IAW regulations implementing 10 USC 130c.
- d. Ensure the document is marked with the appropriate handling instructions or Classifications: For Official Use Only (FOUO), Confidential, Secret, and Top Secret.

## **Section II**

**Document Main Body.** Begin the COE on the first page following the administrative information above.

1. **Introduction.** Provide a brief statement regarding the purpose and scope of the concept of employment for the new materiel solution as it pertains to the organization receiving the materiel solution and how that organization intends to employ the system or equipment.

- a. Purpose
- b. Scope

Example

*“This COE describes organizational/employment concepts for the MAGTF CBRN Set and represents a starting point from which doctrine and procedures can be developed and updated as the program migrates.”*

2. **Mission.** State the mission(s) of the system or equipment. Initially, this may address only the identified deficiency - - articulating the operational deficiency and then, through engineering and manufacturing development, defining what the piece of equipment must be capable of accomplishing.

Example

*“The MAGTF CBRN Set of equipment will increase the MAGTF commander’s CBRN monitor/survey and reconnaissance capability by permitting operations into known and unknown environments and providing MAGTF commander with an increased CBRN and TIM detection and identification capability.”*

3. **Threat.** Briefly describe the threat encountered and their capabilities as well as the system or equipment vulnerability to the threat encountered.

a. General

Example

*“Intelligence sources assess that several countries have active offensive chemical weapons (CW) programs.”*

b. System Vulnerability

Example

*“There is no direct threat to the MAGTF CBRN Set.”*

4. **Description**

a. System Description

Briefly describe the system or equipment. Refer, if appropriate, to the location of more detailed description information; e.g., system specifications or system description documents. The level of detail provided will vary depending on the stage of development the COE supports.

b. System Relationship and Interoperability

Describe where this system/equipment fits within the array of related systems and equipment of the units employing it. Identify other systems or equipment with which the system or equipment must interface. There are four specific relationships which must be considered:

- Items which will be components of this new system.
- Systems containing the subject equipment as a component.
- Other systems which this item will interface/operate with.
- Other systems providing complimentary and/or redundant capabilities.

Describe the physical, electrical, electromagnetic, or optical interrelationships with those other systems or equipment at the appropriate International Standards Organization (ISO)/Open Systems Interconnection (OSI) level.

Both currently fielded equipment and planned or programmed procurements should be addressed. For fielded requirements the remaining useful life of the end item needs to be considered. Will it be in service long enough to be worthwhile incorporating a new piece of equipment into the existing system? Or is there a replacement in the works which it would be wiser to focus on? If this is replacing an existing component of a fielded system, can the engineering still be done?

Identify any systems or equipment that are critical to the employment of the subject system or equipment, describe the dependency, and discuss the relationship between the life cycles of the systems or equipment.

c. Equipment Replaced

Identify any systems or equipment either partially or wholly replaced by the subject systems or equipment. Identify replaced systems or equipment by TAMCN and nomenclature. Briefly discuss the phase-in and phase-out concept for the new and old systems or equipment, respectively.

d. Capability Increase

Discuss the expected increase in capability of the intended user of the new system or equipment and explain how such increase is achieved. Quantified expectations should be used when available.

5. Organization

a. System Location/Distribution

Discuss the general distribution of the item. Include specific T/E or T/O numbers, if known. If not, describe unit type/types. However, depending on type of requirement, this may be the principal driver in determining distributions. If the piece of equipment is organization specific (i.e., Ltwt 155 -- Arty Bn), it may be easier to identify than if it is a general support piece of equipment (i.e., 5 ton trucks). Depending on the equipment, it may be possible to identify a generic concept of distribution such as one per individual, one per fire team, number per organization, one new item for every two old items, etc.

In general, as the requirement is being developed, the principal users should already be known. How many of this solution they may need and how the unit should be organized to employ the equipment may not be known, but the fact that there is a mission need, implies that there is probably an organization whose capability can be improved through the procurement of this item.

b. Personnel Requirements

Discuss the manpower implications in regards to increase in manpower, new Military Occupational Specialties in order to operate the system or equipment.

c. Organizational Structure Requirements

All new equipment will be evaluated for supportability within existing force structure. Possible T/O changes, if known at this time, should be detailed. All additions or deletions to T/Es will require a parallel examination of structure.

d. Mission Requirements/Tactical Structure

Amplify on the stated mission. Include a discussion of the effect the item's mission will have on the organization for battle. Identify changes in processes/procedures required to allow accomplishment of the item's mission and delineate the nature of dependencies.

6. **Training**

a. New Skills/Training Requirements

Discuss the training implications as it pertains to the system or equipment. Briefly talk about the New Equipment Training (NET) Teams and how they will support the system or equipment. Who will supply the training and who will develop the supply and maintenance procedures?

Example

*“The Marine Corps Systems Command (MARCORSYSCOM), Training and Education Command (TECOM), and the subject matter experts (SMEs) at the U.S. Marine Corps CBRN Defense School at Ft. Leonard Wood, MO. will develop Training and Readiness Standards for these sets.”*

b. Training Methods and Location

Discuss the levels of training, methods and location based on the system or equipment being fielded. This could include the following:

- Introductory Training
- Operational and Exercise Training
- New Equipment Training (NET)
- Additional Recommended Courses

7. **Operational Employment**

a. Methods of Employment

Discuss the methods of employment to accomplish the item's mission. Discuss how the item fits into the overall tactical scheme. Identify how this may change methods of employment of other systems or equipment that may be impacted by introduction of the subject item. The answer to this question helps indicate what the basis should be for determining the required quantity.

b. Employment Prerequisites

Example

*“Employment of equipment will be in accordance with unit standing operating procedures (SOPs) as guided by 29 Code Federal Regulations (CFR) 1910.120.”*

c. Mission Planning Factors

Example

*“The mission planning factors for the MAGTF CBRN CM set are defined by the operations order or exercise training objectives.”*

d. Mission Execution Factors

Example

*“All warning and reporting of CBRN-related hazards will be done in accordance with Allied Technical Publication (ATP) 45 and MCRP 3.37.2A Multi-Service Doctrine for CBRN Contamination Avoidance.”*

e. Control

Example

*“Control procedures are in accordance with SOP.”*

f. Frequency, Assignment and Use

If system or equipment is Net-centric then there needs to be a discussion pertaining to the frequency being used, unit it is assigned to and how the unit intends to use it.

g. Security

Example

*“IAW with local SOPs.”*

h. Mobility/Transportability

Discuss briefly how the system or equipment will be transported and whether the transportation is organic to the unit. Also discuss any supporting equipment and repair items that must also be transported.

i. Safety

Discuss the safety precautions as it pertains to the individual using the system or equipment and the safety precautions as it pertains to the system or equipment.

j. Sustainment

Discuss sustainment requirements and maintenance requirements as it pertains to system or equipment.

8. **Mission Effectiveness Criteria**

Discuss the capabilities that the system or equipment will provide in reducing the deficiency that was identified. Also discuss the attributes of the system or equipment.

9. **Appendices**

Intentionally Blank

## APPENDIX C

### CDD/CPD Development

An Integration Division controls the pace of Marine Corps force development through the administration of the JCIDS process.

CDDs and CPDs are not “written” - they are “developed.” JCIDS documents are not essays intended for the bookshelf collection of a military library. JCIDS documents are staffing tools used to support a milestone decision in the acquisition process.

The templates for each JCIDS document are in the *Manual for the Operation of JCIDS* and approved alternative formats are on the JCIDS Manual website at: [https://intellipedia.intelink.gov/wiki/JCIDS\\_Manual](https://intellipedia.intelink.gov/wiki/JCIDS_Manual). A CDD/CPD is intended to be no more than 45 pages long. Developing the document is less about writing and more about data collection. Most of the information that goes into these documents already exists in a reference or is provided by another organization. Table D-1 shows the outline of a CDD, the source of the information for each section, and time allotted to develop it. A skillful CIO or Program Analyst can derive all of the main sections of a CDD within twelve weeks by effectively leading and supervising an IPT. By holding weekly meetings the CIO should simultaneously task IPT members and supervise the collection of the required information.

It does not have to take eighteen months to develop a JCIDS document. You can do much better than that by planning ahead, leading an IPT, tracking tasks and properly leveraging time and resources.

#### **CDD Development Guidelines**

Prerequisites for CDD development include a CONOPS, ICD, AOA, and a Milestone A decision. Alternative prerequisite to CDD development is a JROC and/or MROC validated need identified in a combatant commander integrated priority list, lessons learned, or urgent universal need statement.

#### **Week 1**

Define the scope of the CDD.

Assess the Milestone (MS) A decision, AOA, applicable sections of the Capability Requirements and Gap Description table from section 4 of the ICD, and available architectural views.

Review assessment results with the Program Manager (PM); resource sponsor; and Integration Division Branch Head.

Coordinate with the Milestone Decision Authority (MDA) to establish a MS B decision date.

### **Week 2-3**

Charter an IPT.

Identify required IPT members.

Reverse plan from the MS B decision date.

Identify a high tempo/supportable IPT battle rhythm.

Develop a plan of action and milestones (POA&M). The POA&M should be guided by the phases, gates and milestones identified in SECNAVINST 5000.2E.

*Rule of thumb: Even though the Manual for the Operation of JCIDS staffing sequence is only three months long, plan to complete your final CDD draft six months prior to MS B to allow plenty of extra time for delays and potential holdups due to critical comment adjudication.*

Develop and staff the IPT charter. See Appendix D, IPT Guidelines for details.

### **Week 4-6**

Conduct the IPT kick-off.

Develop and staff the Concept of Employment (COE), see Appendix B for format.

### **Week 7-19**

Develop the CDD.

See Table B-1 for a sample CDD development matrix.

<b>CDD</b>				
See the Manual for the Operation of JCIDS Enclosure G				
#	Section	Source	Other References	Time to Develop
	Exec Sum	CIO		1 Day
1	Capability Discussion	CIO	ICD JCA's	1 Day
2	Analysis Summary	CIO	ICD AOA Other official studies	3 Days
3	Concept of Operations Summary	CIO	JOpsC Service Concepts CONOPS COE	3 Days
4	Threat Summary	MCIA	Official threat assessments	4 Weeks
5	Program Summary	MCSC	Acquisition Strategy	3 Weeks
6	System Capability Required for the Increment	CIO led IPT, MCSC and MCOTEA primary POCs	ICD Capability Description Table COE Lessons Learned UNS CJCSI 6212.01E	12 Weeks
7	FOS/SOS Synchronization	CIO led IPT, MCSC primary POC		8 Weeks
8	IT and NSS Supportability	CIO led IPT, MCSC primary POC	DoDD 8320.2  ISP	8 Weeks
9	Intel Supportability	HQMC Intel and/or Intel ID POC	CJCSI 3312.01A	4 Weeks
10	E3 and Spectrum Supportability	CIO led IPT, MCSC primary POC	DoDD 4650.1	8 Weeks
11	Technology Readiness	MCSC	DoD Technology Readiness Assessment Deskbook	8 Weeks
12	Assets Required to Achieve IOC	CIO led IPT	Acquisition Strategy Report	3 Weeks
13	Schedule and IOC and FOC Definitions	CIO led IPT	Acquisition Strategy Report	3 Weeks
14	Other DOTMLPF and Policy Considerations	CIO led IPT, TECOM primary POC		8 Weeks
15	Other System Attributes	CIO led IPT, MCSC primary POC		8 Weeks
16	Program Affordability	CIO led IPT, MCSC primary POC	Acquisition Strategy Report	8 Weeks
	Appendix A NR KPP	CIO led IPT, Architecture Branch OV lead, MCSC SV lead	CJCSI 6212.01E  Operational Architecture Process and Product Guide	12 Weeks

**Table D-1. CDD Development Matrix (Sample)**

## **Week 20**

Staff and adjudicate CDD comments.

## **Week 21**

Prepare the CDD validation brief in accordance with the *JROC Administrative Guide* (go to KMDS “Important Documents” for the latest version of this guide).

## **CPD Development Guidelines**

### **Week 1**

Following the MS B decision, copy, cut, paste the CDD. Change the title on the CDD to CPD. Change the “Development Threshold” and “Objective” on the tables in section 6 to read “Production Threshold” and “Objective.”

### **Week 2 to 3-6 months prior to MS C**

Closely monitor the program during the Engineering and Manufacturing Development Phase of the acquisition process.

Leverage the IPT to continue refinement of the DOTMLPF-P analysis.

Convene the IPT to review the developmental test and evaluation results as they become available from the PM. Refine the developmental threshold and objective performance attribute values to production threshold and objective performance attribute values based on the test and evaluation results.

Refine the architecture views based on the test and evaluation results.

Finalize the threshold and objective performance attribute values and architecture following the PM’s design readiness review.

### **No later than 3 months prior to MS C**

Staff and adjudicate CPD comments.

Prepare the CPD validation brief in accordance with the *JROC Administrative Guide* (go to KMDS “Important Documents” for the latest version of this guide).

## **APPENDIX D**

### **Integrated Product Team Guidelines**

#### **Purpose**

The purpose of having an Integrated Product team (IPT) during the capabilities development process is to pull key players together to obtain a mutual understanding of capabilities and requirements that are needed to address identified shortfalls. These meetings will provide a structured approach to gathering information and supporting documentation that is essential to developing capabilities documents. IPTs are also referred to as "working groups", such as the DOTMLPF Working Group (DWG).

#### **Steps to IPT Success**

Since we are all busy and no one in the CDD has time to waste on "go nowhere" meetings, it's essential that CIOs who are conducting IPTs are well prepared so they can proceed in an efficient and effective manner. The following are steps that should be taken to ensure a well-executed IPT:

1. Develop an IPT charter that identifies the purpose, expected duration, membership and intended business practices.
2. Identify the IPT SMEs who can assist in accomplishing the IPT's purpose in an expedient and thorough manner.
3. Ensure meetings are scheduled at facilities that offer the technical support required to support the planned IPT structure.
4. Prepare the IPT agenda in advance and provide it to members of the IPT prior to the scheduled meeting time. This will allow members to adequately prepare questions and support materials.
5. Encourage full participation throughout the IPT process. Without full participation, the purpose of the IPT is lost.
6. During each IPT meeting, clearly document items that are agreed upon, tasks that are assigned, and action items that need to be addressed at a later date. Upon conclusion of each IPT, prepare minutes that include this information and a detailed description of the topics discussed. Provide copies of the meeting minutes to the meeting participants and other stakeholders as required.

Once the charter is complete, it should clearly state the team's mission, its purpose and objectives. It should identify the capability documents that the IPT will focus on developing. While an IPT should be held to address the development of each of the capabilities development documents (the ICD, CDD and CPD), a new charter should be

created to support each individual document since there is a significant time lapse between each. Within each of these charters, the anticipated time for completion of all three of the documents should be included in order to support consistent progress through the development of each document. Any performance metrics included within an IPT will provide focus and momentum to the team as a whole. Therefore, metrics should be stated clearly within each charter.

### **Selecting Members**

Members of the IPTs will represent the Marine Corps commands and organizations, which include any operating and supporting forces that have an interest in the system being documented. Team member attributes that are required for the success of the IPT are as follows:

- Members should be team players
- They should offer some type of functional area expertise
- The need to understand the user environment and operational culture
- They should be articulate and concise
- They need an understanding of the limits of empowerment
- They should have an understanding of the impacts of trade-offs between alternatives

### **Developing the POA&M for the IPT**

The important take away from this section is that an IPT should never be initiated with a blank sheet of paper or an unclear plan of action. When you develop your POA&M for your IPT, consider the following steps:

1. Develop the Charter
2. Create the initial draft of the document that will be the subject of the IPT
3. Submit the document to team members to review prior to the first IPT
4. Make suggested recommendations to produce the first working draft
5. Conduct initial IPT
6. Collect and refine data and re-work the draft document
7. Submit to members for review
8. Assess completion status. If the document is complete, begin process for the JCIDS / MROC review

9. If the document is not complete, conduct a follow-on IPT to work through points of contention.

10. POA&M should conclude with an MROC approved capabilities document

Intentionally Blank

## Notes