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THE NEW DOD INSTRUCTION 5000.02: AN ANALYSIS OF THE EFFICIENCIES TO BE GAINED

June 2015

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In November 2013, the Deputy Secretary of Defense issued a memorandum titled "Defense Acquisition," which stated that the 2008 version of the DOD Instruction (DODI) 5000.02 required revision in order to create an acquisition policy environment that will achieve greater efficiency and productivity in defense spending, and effectively implement the Defense Department's Better Buying Power initiatives. A year later, the Interim DODI 5000.02 was issued and required for use, and the final instruction was signed into effect in January 2015. While the new instruction canceled six directive-type memorandums and reportedly incorporated them in the new instruction, efficiencies are not easily identified. This research provides an analysis of the new DODI 5000.02 and the Better Buying Power initiatives.

It was discovered that the efficiencies to be gained have not been properly identified. It is left for interpretation what those efficiencies are. If they are decreased costs and schedules, the metrics used in this research, they have not been achieved to date. Proper metrics for these efficiencies need to be formulated and articulated to the defense acquisition workforce.

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THE NEW DOD INSTRUCTION 5000.02: AN ANALYSIS OF THE EFFICIENCIES TO BE GAINED

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LIST OF ACRONYMS AND ABBREVIATIONS

AOA	analysis of alternatives
AT&L	Acquisition, Technology and Logistics
ACAT	acquisition category
BBP	better buying power
BCL	business capability life cycle
CDD	Capability Development Document
DBS	defense business system
DOD	Department of Defense
DODI	Department of Defense Instruction
DT	developmental testing
DTM	directive type memorandum
EMD	Engineering and Manufacturing Development
FYDP	Future Years Defense Program
GAO	Government Accountability Office
ICD	Initial Capabilities Document
ICE	independent cost estimate
IOC	Initial Operating Capability
IP	intellectual property
KPP	key performance parameter
LRIP	low rate initial production
MDA	milestone decision authority
MDD	material development decision
MOP	measures of performance
MS	Milestone
MSA	Materiel Solutions Analysis
NDAA	National Defense Authorization Act
OMS/MP	Operational Mode Summary/Mission Profile
OT	operational testing
PBL	performance-based logistics

PDR	preliminary design review
PEO	Program Executive Officer
PM	Program Manager
PSM	Product Support Manager
RFP	request for proposals
SEP	systems engineering plan
SETR	systems engineering technical review
TEMP	test and evaluation master plan
TMRR	Technology Maturation and Risk Reduction
USD	Under Secretary for Defense

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I.   INTRODUCTION

For more than 50 years, Congress and the Department of Defense (DOD) have explored ways to improve acquisition outcomes, including reform (Government Accountability Office [GAO], 2013). In 1971, the DOD issued its initial 5000-series acquisition policy. The policy, which totaled only seven pages, provided for minimum formal reporting and more streamlined layers of authority (Deputy Secretary of Defense, 1971). However, over time, it became clear to leadership that a large, complex bureaucratic process had supplanted the original efficient construct. So, 15 years after the original issue (in 1986), President Regan established his "Blue Ribbon Commission" to study defense management and provide recommendations for improvement (President's Blue Ribbon Commission on Defense Management, 1986). This commission, commonly known as the Packard Commission (after the commission chairman, David Packard), reported that the defense acquisition system had "deeply entrenched" problems that stemmed from an "increasingly bureaucratic and overregulated process" (President's Blue Ribbon Commission on Defense Management, 1986, p. 44).

This report led to the Goldwater-Nichols Department of Defense Reorganization Act of 1986—a large restructuring of the DOD (Goldwater-Nichols Department of Defense Reorganization Act, 1986). However, since then, laws, directives, orders and regulations governing the defense acquisition system have continued to be published. For example, requirements were added to improve cost estimating, logistics planning, design reviews, and technology maturity assessments (GAO, 2015b). Each of these areas had been in need of improvement, and individual documentation and review requirements were aimed at addressing known shortfalls in an effort to make a better system (GAO, 2015b).   Although the intent of the added requirements was good, significant inefficiencies still existed, and improvements were still needed.

To this end, in November 2013, the Deputy Secretary of Defense issued a memorandum titled "Defense Acquisition." This memorandum stated that the 2008 version (hereafter referred to as the old instruction) of the DOD Instruction 5000.02 required revision in order to create an acquisition policy environment that would achieve

greater efficiency and productivity in defense spending, and effectively implement the Defense Department's Better Buying Power (BBP) initiatives (Carter, 2013). A year later, the Interim DOD Instruction (DODI) 5000.02 was issued and required for use, and the final instruction was signed into effect in January 2015 (hereafter referred to as the new instruction). While this new instruction, in an effort to streamline policy, canceled six directive-type memorandums (DTM) and incorporated them in the new instruction, efficiencies are not easily identified.

More than a year after implementation of the new policy, it appears that efficiencies and productivity may not yet have been realized. A Government Accountability Office (GAO) Report in February 2015 called for a streamlining in the decision making process of DOD weapon systems in order to reduce inefficiencies (GAO, 2015b). Then, in another GAO report in March 2015, they assessed that most of the 78 major defense acquisition programs (MDAP) had experienced a cost increase over the past year (GAO, 2015c). Adding to the bad news, the GAO report also found that the time required to deliver capability to the warfighter had increased.

A.   RESEARCH OBJECTIVE

The issuance of the new DODI 5000.02 has created the need for program offices with planned acquisition baselines to consider the implications of the new guidance. While Mr. Kendall, the Under Secretary of Defense for Acquisitions, Technology and Logistics (USD, AT&L), does not explicitly call for acquisition reform (Kendall, 2014b), he has rewritten the DOD's instruction on the operation of the Defense Acquisition System. The DOD, with the hope that it will allow for greater efficiency and productivity, has published the new instruction (Garamone, 2013).

(1)   Primary Research Questions

The objective of this research is to understand how this new instruction is expected to increase efficiencies within the Defense Acquisition System.

- Since the intent of the new order is to gain efficiencies and productivity (Carter, 2013), what are the efficiencies expected to be gained by acquisition programs as they implement the changes of the new order?

- How have program offices in various stages of the acquisition model complied with the new instruction?

(2)   Secondary Research Questions

In order to find a meaningful answer to the primary research questions, the following secondary questions were used to shape the scope of the research:

- What are the major changes within the new instruction and, more importantly, what did the authors of Interim DoDI 5000.02 eliminate, change or add to meet the overarching goal of achieving greater efficiency and productivity in defense spending?
- What are the roadblocks (perceived and real) that the program offices are experiencing as they incorporate this new guidance?

B.   METHODOLOGY

The research attempted to answer the research questions utilizing a grounded theory strategy. First, a thorough review of the old instruction provided the baseline for the analysis. Next, a study of the current regulation documented the differences between new instruction and the baseline. This was followed by an analysis of other pertinent regulations to further inform research.

A series of one-on-one interviews followed a semi-structured protocol to gather stakeholders' views on the research questions. The stakeholders were acquisition professionals that worked within the defense acquisition system. The interviews assessed stakeholder opinions of the changes provided by the new instruction. Finally, using grounded theory techniques, the study utilized a qualitative analysis of the data, and reported findings, conclusions and recommendations.

C.   REPORT ORGANIZATION

Chapter I of this research provides background for the problem and defines the research objectives, questions, scope, and methodology. Chapter II provides a detailed review of DOD Instruction 5000.02, and the differences between the 2008 (old) version, and the 2015 (new) version. The research includes an analysis of other pertinent regulatory and statutory documents as they relate to the Defense Acquisition System. Chapter III presents the data, including the specific opinions of the stakeholders

interviewed, and the overall findings of the qualitative analysis. Chapter IV reveals the conclusions and provides recommendations for further research.

D. SUMMARY

This chapter has reviewed the history of the DOD Instruction from its first issuance of seven pages in 1971, to today's instruction. The current state of budget overruns and schedule slippages were introduced to highlight the problem and provide the background for the need to update the instruction. This problem has been refined into research objectives with research questions, and special emphasis on the importance of this study. Finally, the scope and methodology were set forth. Next, we will take a closer look at the regulatory and statutory directives used in this analysis.

II.   LITERATURE REVIEW

A study of past and present literature was critical to understanding the defense acquisition system. First, a review of the GAO reports mentioned in Chapter I, followed by pertinent past acquisition documentation, including the old instruction, focused on the changes over time, and the reasoning for the same. Next, a study of the new DODI 5000.02 identified the changes incorporated from the previous instruction and other directives. Finally, the review studied the Better Buying Power initiatives, and other relevant policies.

A.   GAO REPORT 15-192: ACQUISITION REFORM, DOD SHOULD STREAMLINE ITS DECISION-MAKING PROCESS FOR WEAPON SYSTEMS TO REDUCE INEFFICIENCIES

In February 2015, as mandated by the National Defense Authorization Act for fiscal year 2014, the GAO reviewed the DOD's acquisition process (National Defense Authorization Act [NDAA] for Fiscal Year 2014, 2013). The GAO report highlighted that programs spend an unnecessary amount of time and resources documenting the information required at milestones, and that the large number of required stakeholder reviews contributed to the problems (GAO, 2015b). According to the report, on average, over two years was spent by the program offices answering numerous requests for information for the programs most recent milestone decision.

A primary reason it takes over two years to complete the information required for a milestone decision is the large number of stakeholders that review the documents at the many organizational levels above the program office. The GAO found that the milestone decision reviews by over eight different levels of stakeholders added only moderate or less value to most documents (GAO, 2015b). DOD recognizes that it has too many levels of review and has accomplished several initiatives to eliminate the inefficiency (GAO, 2015b). However, the changes have resulted in limited success with reducing the time and effort needed to review documentation.(GAO, 2015b)

B. GAO REPORT 15–342SP: DEFENSE ACQUISITIONS, ASSESSMENTS OF SELECTED WEAPON PROGRAMS

In March 2015, the GAO published its annual assessment of DOD weapon system acquisitions, an area on GAO's high-risk list (GAO, 2015c). The report highlighted that defense acquisition programs continued to experience cost and schedule overruns. Further, GAO emphasized the need to sustain the implementation of acquisition reforms, and complete developmental testing before beginning production. Forty-one programs in the portfolio lost buying power during the past year, resulting in $5.3 billion in additional costs (see Table 1) (GAO, 2015c).

Table 1.   Buying Power Analysis for the 2014 Portfolio (Fiscal Year 2015, dollars in billions) (from GAO, 2015c)

	Number of programs	Actual procurement cost change	Change attributable to quantity changes	Change not attributable to quantity changes
Programs that lost buying power	41	$8.4	-$12.1	$20.5
Programs that gained buying power	33	-$16.5	-$1.3	-$15.2
Programs with no change in buying power	4	$0.0	$0.0	$0.0
Portfolio totals	**78**	**-$8.1**	**-$13.4**	**$5.3**

C. DEPARTMENT OF DEFENSE DIRECTIVE 5000.1: ACQUISITION OF MAJOR DEFENSE SYSTEMS

Issued in July 1971, this was the first of the 5000 series regulations of the defense acquisition systems (Deputy Secretary of Defense, 1971). Only seven pages long, the directive called for decentralized authority in defense acquisition, with minimal layers of authority between the program manager (PM) and the Component Head. Specifically, the original guidance provided for:

- Minimal layers of authority above the program office (Deputy Secretary of Defense, 1971, p. 2)
- Very limited demands on programs for formal reporting (Deputy Secretary of Defense, 1971, p. 6)

- Minimal demands for non-recurring information and for responding to these requests informally (Deputy Secretary of Defense, 1971, p. 6)
- The development of a single, key document to support program management and milestone decision making (Deputy Secretary of Defense, 1971, p. 3)

D.   DOD DIRECTIVE 5000.01: THE DEFENSE ACQUISITION SYSTEM

DOD Directive 5000.01, dated May 12, 2003 and certified current as of November 20, 2007, provides management principles and overarching policy of the Defense Acquisition System (USD (AT&L), 2007). Including its one enclosure, the directive is only ten pages long. The directive gives wide-ranging guidance on acquisition management areas such as competition, cost, affordability, and performance-based acquisitions and logistics (PBL).

E.   GOLDWATER-NICHOLS DOD REORGANIZATION ACT OF 1986

President Regan's Blue Ribbon Commission on Defense Management in 1986 identified the same problems that plague the defense acquisition system today, namely, the stifling burdens of regulation, reporting, and oversight" (President's Blue Ribbon Commission on Defense Management, 1986, p. xi). The recommendations from this report led Congress to pass the Goldwater-Nichols Department of Defense Reorganization Act of 1986. The Act was a major restructuring of the DOD, strengthening the civilian authority over the department by aligning the Combatant Commanders to the Secretary of Defense, bypassing the service chiefs. (Goldwater-Nichols Department of Defense Reorganization Act, 1986) The Act also delegated all defense acquisition responsibility to the USD AT&L. Before this Act, the Deputy Secretary of Defense and various other under-secretaries and assistant-secretaries had responsibilities in defense acquisition (Nemfakos, Blickstein, McCarthy, & Sollinger, 2010).

F.   DIRECTIVE TYPE MEMORANDUM 11-009: ACQUISTION POLICY FOR DEFENSE BUSINESS SYSTEMS

DTM 11-009 was issued in June of 2011, and canceled in November 2013 with the issuance of the interim DODI 5000.02. DTM 11-009 established the policy that required the use of the Business Capability Life cycle (BCL) model as the acquisition model for defense business systems (DBS). Under this policy, an acquisition process must reach IOC with five years from MS A (USD (AT&L), 2011b). As seen in Figure 1, DTM 11-009 provided an incremental acquisition model, referred to as the Business Case Life cycle (BCL), and encouraged MDAs to tailor this model as they needed (USD (AT&L), 2011b).
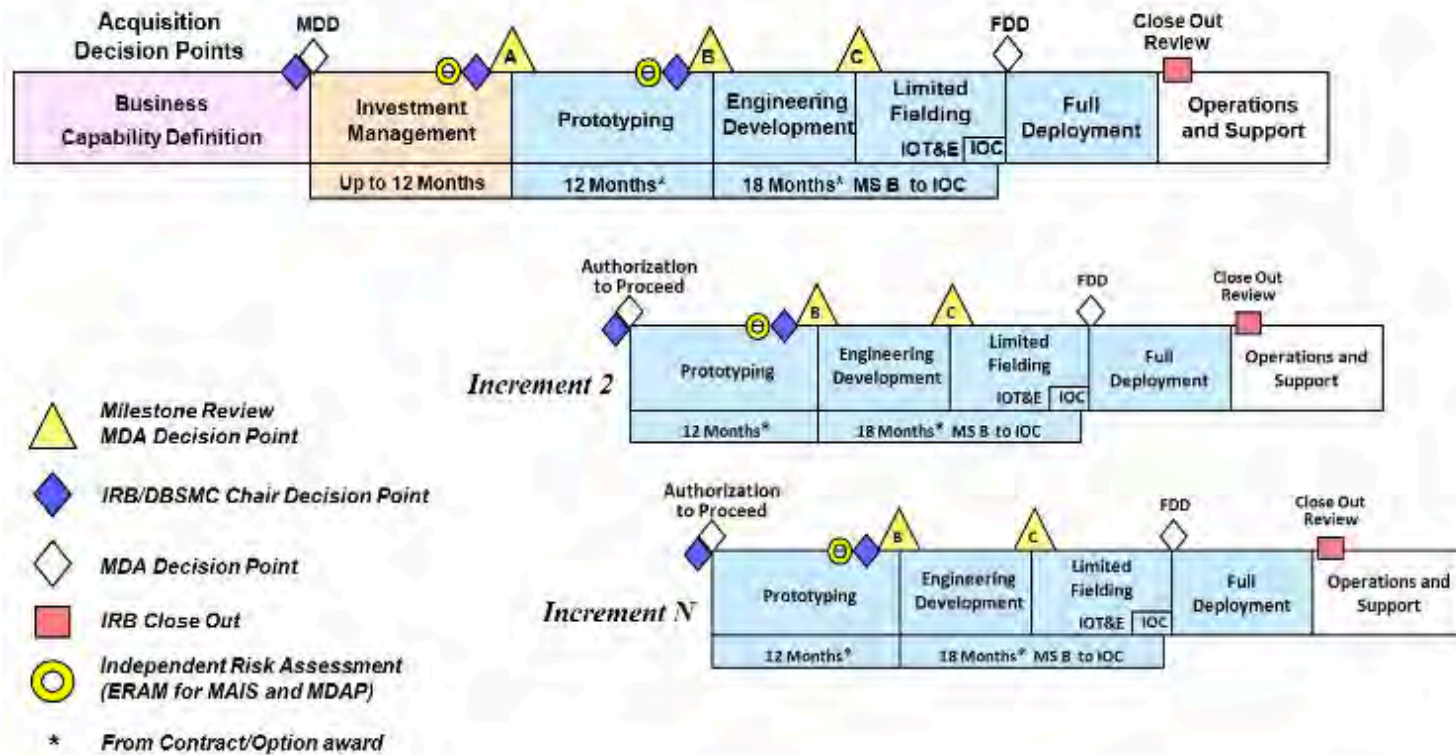
Figure 1.   BCL Acquisition Business Model (from USD (AT&L), 2011b)

G. DODI 5000.02: OPERATION OF THE DEFENSE ACQUISITION SYSTEM

Many of the changes from the 2008 DODI 5000.02 to the interim instruction issued in November 2013 (and finalized in January 2015) include the incorporation of previously implemented policy contained in numerous DTMs, policy memos, directives, instructions and other guidance issued since 2008. Of particular note are the cancellation of the following DTMs, and the incorporation of that material into the interim instruction (DOD, 2015):

- *DTM 09–025: Space Systems Acquisition Policy*
- *DTM 09–027: Implementation of WSARA 2009*
- *DTM 10–015: Requirements for Life Cycle Management and Product Support*
- *DTM 10–017: Development Planning*
- *DTM 11–003: Reliability Analysis, Planning, Tracking, and Reporting*
- *DTM 11–009: Acquisition Policy for Defense Business Systems*

1. General Changes

Many of the changes from the old instruction are related simply to naming conventions. For example, the Test and Evaluation Strategy is now called the Test and Evaluation Master Plan (TEMP) and the Development RFP Release Decision Point is the new name for the Pre-Engineering and Manufacturing Development (EMD) Point. The following overview of the changes between the two versions of the instruction provides a foundation for the research. The new instruction is 74 pages larger than the previous edition and includes five new enclosures. (See the Appendix for a complete list of the differences.)

The new instruction authorizes and strongly encourages milestone decision authorities (MDA) to tailor regulatory requirements and procedures, to include strategies, oversight, program information, phase content, timing and scope of decision reviews, and decision levels based on the specifics of the product being required. However, in some instances, program offices that tried to tailor their programs found it too difficult to obtain waivers for milestone requirements. The significant time and effort was found to

be onerous, and program offices often found it easier to simply complete the requirements rather than try to obtain waivers (GAO, 2015b).

2. Program Models

The 2008 instruction provided one acquisition program model for program offices to follow (see Figure 2). The new instruction provides examples of six program models (DOD, 2008). These models have been reported as a highlight of the new instruction (Manning, 2015). DOD's intent for these models is to not be restrictive in nature, but rather to provide a starting point for acquisition program planning (DOD, 2015). Mr. Kendall continues to emphasize this point when speaking about the new order and model examples by stating that "program managers and program executive officers should use these models as references to assist their thought processes and analysis" (Roulo, 2015). Figures 3 through 8 provide the new models with descriptions to include their intended uses.
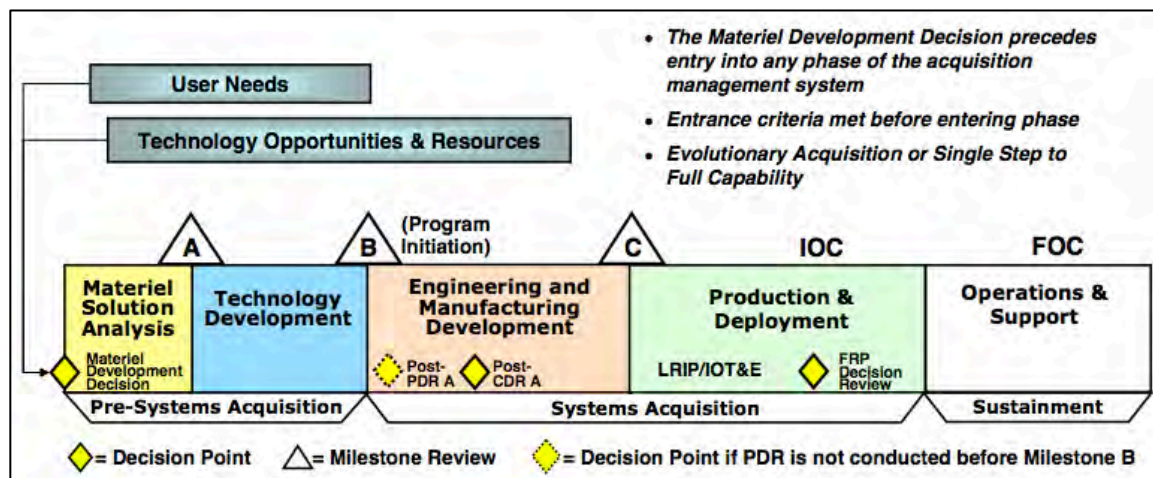
Figure 2. The Defense Acquisition Management System (from DOD, 2008)

a. Model 1: Hardware-Intensive Program

This model includes most weapon systems and programs, such as tactical radios with significant hardware development. This is the "classic" model that has existed in some form in all previous editions of DODI 5000.02 (see Figure 3). It is the starting point for most military weapon systems. However, these products almost always contain software development resulting in some form of Hybrid Model A (DOD, 2015).
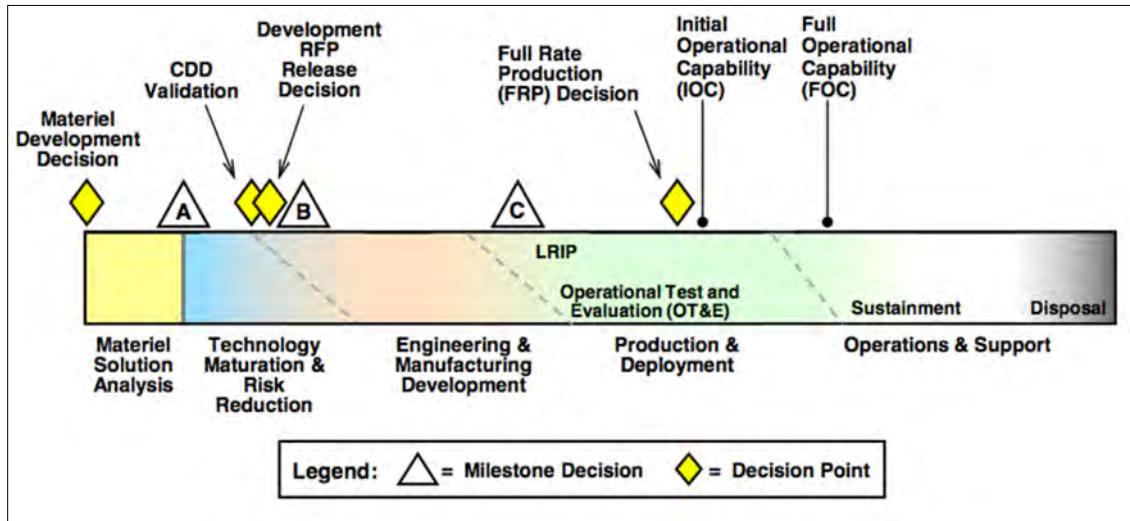
Figure 3.   Hardware Intensive Program (from DOD, 2015)

b. *Model 2: Defense Unique Software Intensive Programs*

The next model is designed for the development of DOD unique software requiring multiple software builds before a product can be fielded (see Figure 4). Examples of this type of product include military unique command and control systems, and significant upgrades to the combat systems found on major weapons systems, such as surface combatants and tactical aircraft (DOD, 2015).
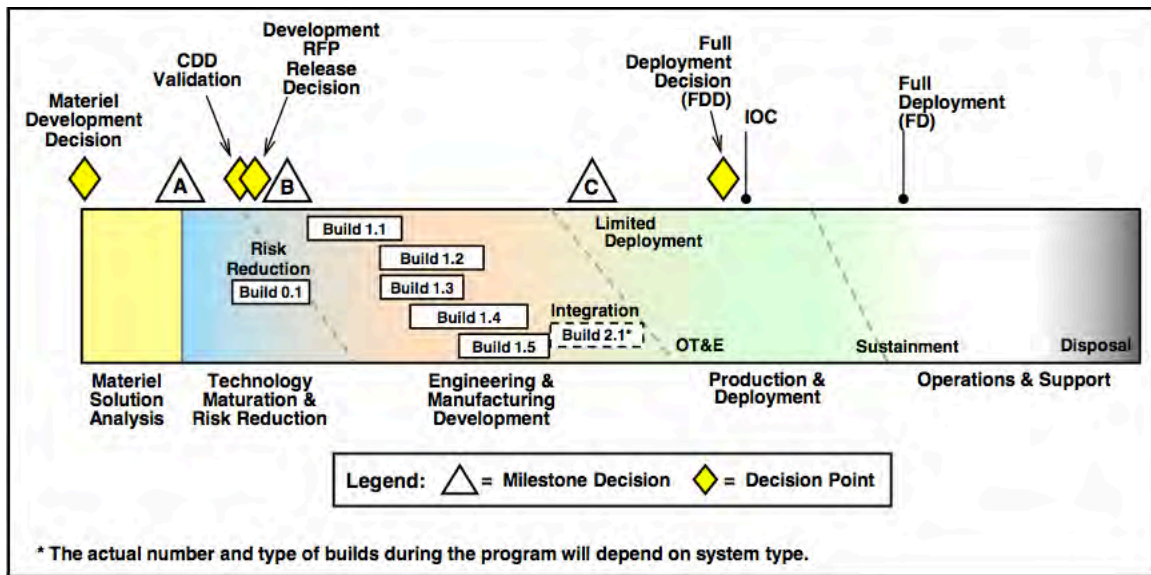
Figure 4.   Defense Unique Software Intensive Program (from DOD, 2015)

c. *Model 3: Incrementally Fielded Software Intensive Programs*

Figure 5 is a model that has been adopted for many defense business systems. It also applies to upgrades to some command and control systems or weapons systems software, where deployment of the full capability will occur in multiple increments as new capability is developed and delivered, nominally in 1- to 2- year cycles. The period of each increment should not be arbitrarily constrained. The length of each increment and the number of deployable increments should be tailored, and based on the logical progression of development and deployment for use in the field for the specific product being acquired (DOD, 2015).
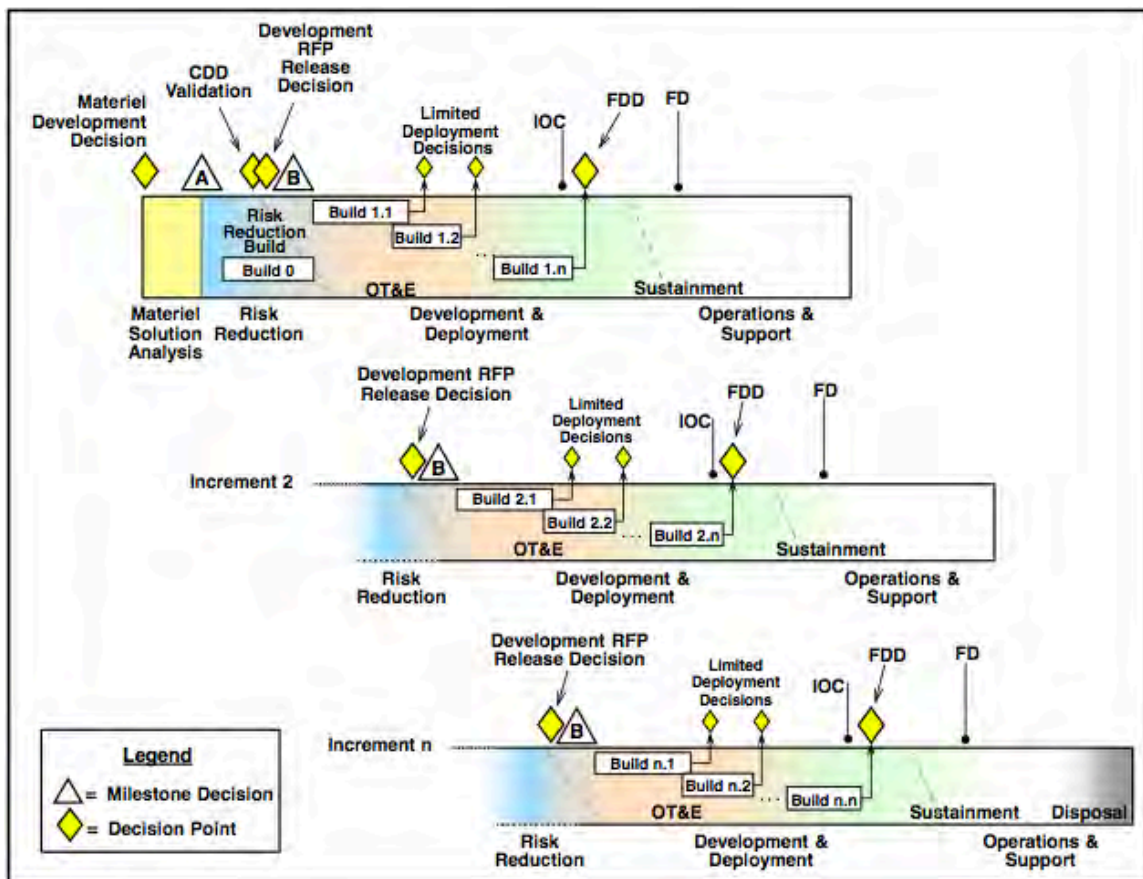
Figure 5.   Incrementally Fielded Software Intensive Program (from DOD, 2015)

d.   *Model 4: Accelerated Acquisition Programs*

Figure 6 is a model that applies when schedule considerations dominate over cost and technical risk considerations. This model compresses or eliminates phases of the process, and accepts the potential for inefficiencies in order to achieve a deployed capability on a compressed schedule (DOD, 2015).
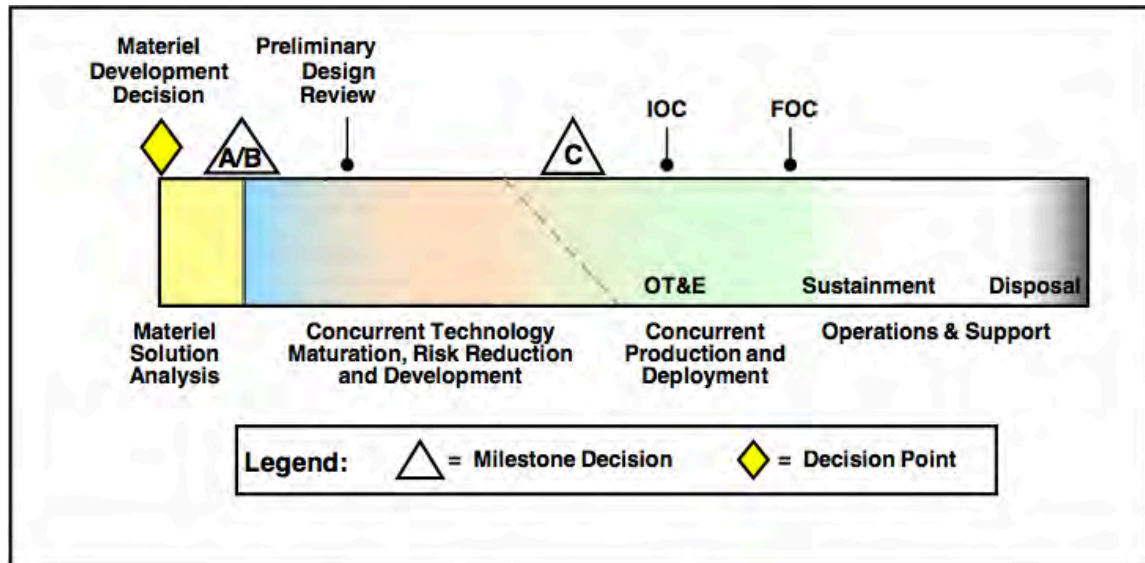
Figure 6.   Accelerated Acquisition Program (from DOD, 2015)

e. Model 5: Hybrid Model A (Hardware Dominant)

Figure 7 is a model depicting how a major weapons system combines hardware development as the basic structure, with a software intensive development that is occurring simultaneously with the hardware development program (DOD, 2015).
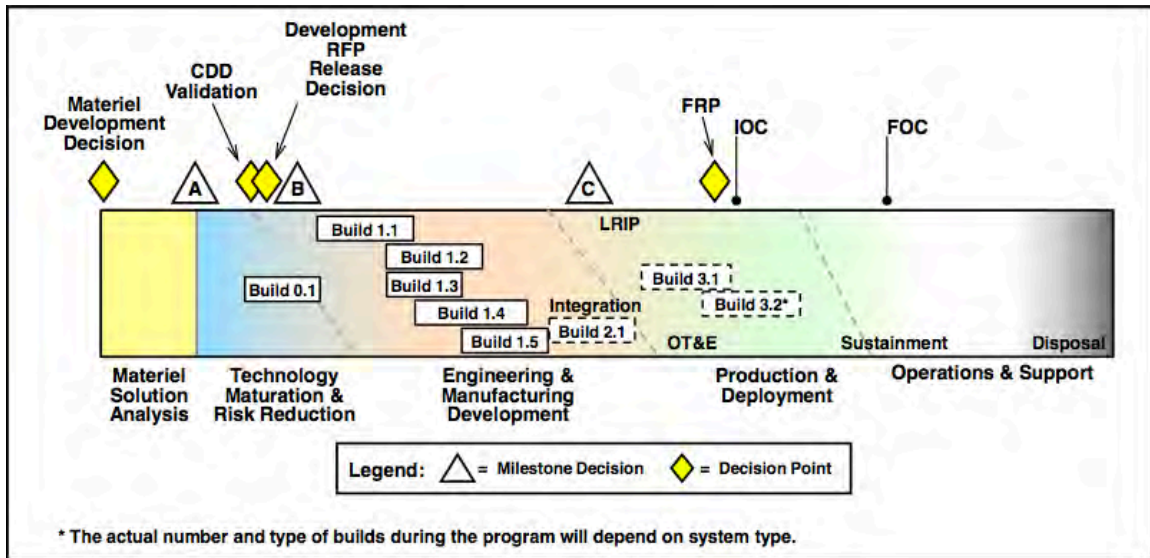
Figure 7.   Hybrid Model A (Hardware Dominant) (from DOD, 2015)

f. *Model 6: Hybrid Model B (Software Dominant)*

Figure 8 depicts how a software intensive product development can include a mix of incrementally deployed software products or releases that include intermediate software builds (DOD, 2015).
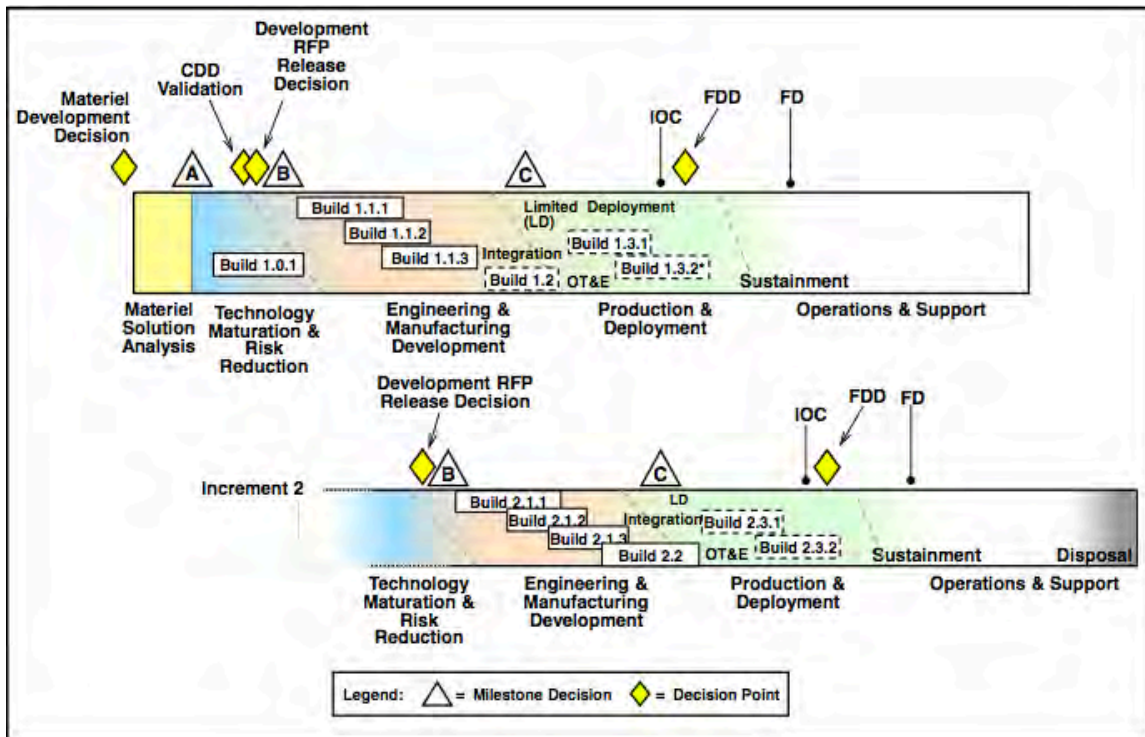
Figure 8.   Hybrid Model B (Software Dominant) (from DOD, 2015)

H. BETTER BUYING POWER

Better Buying Power (BBP) is the implementation of best practices to strengthen the Defense Department's buying power, improve industry productivity, and provide an affordable, value-added military capability to the Warfighter ("What Is Better Buying Power?", n.d.). Launched in 2010, BBP encompasses a set of fundamental acquisition principles to achieve greater efficiencies through affordability, cost control, elimination of unproductive processes and bureaucracy, and promotion of competition. Also, BBP initiatives incentivize productivity and innovation in industry and Government, and should improve tradecraft in the acquisition of services. Acquisition, Technology and Logistics (AT&L) has identified 36 initiatives grouped under seven focus-areas to restore affordability in defense procurement and improve defense industry productivity ("What Is Better Buying Power?", n.d.).

BBP 1.0 was introduced in 2010 as part of the DOD's Efficiency Initiative. The objective was to deliver war-fighting capabilities needed within the constraints of a declining defense budget, by achieving better buying power for the Warfighters and taxpayer (Carter, 2015).

BBP 2.0 rolled out in November 2012 and marked the next step in the Department of Defense's process of continuous improvement. BBP 2.0's objective was to help improve the Department's effectiveness in the tradecraft of acquisition. Many initiatives that were first introduced in BBP 1.0 remained, while a set of new initiatives were identified and added to address security and fiscal realities (Kendall, 2013b).

BBP 2.0 has 36 initiatives that are organized into seven focus areas. These focus areas are:

- Achieve Affordable Programs
- Control Costs throughout the Product Life cycle
- Incentivize Productivity and Innovation in Industry and Government
- Eliminate Unproductive Processes and Bureaucracy
- Promote Effective Competition
- Improve Tradecraft in Acquisition of Services

In September 2014, The Office of the Under Secretary of Defense for AT&L released the interim version of BBP 3.0. This white paper provided insight into the future release of BBP as a continuation of the first two initiatives.

> The progression from BBP 1.0 to 2.0 reflected a change in emphasis from specific "best practices" to an increased emphasis on helping acquisition professionals think critically and make better decisions as they confront the myriad, complex situations we encounter in defense acquisition. In BBP 2.0 we emphasized professionalism and providing better tools to help the acquisition professionals in DOD make sound decisions. We also continued many initiatives from BBP 1.0 and made adjustments in some areas based on our experience and feedback from industry and government. BBP 3.0 continues the focus on continuous improvement with a new emphasis on initiatives that encourage innovation and promote technical excellence with the overarching goal of ensuring that the United States' military has the dominant capabilities to meet future national security requirements (Kendall, 2014a, p. 2).

Particularly noteworthy in BBP 3.0 is the emphasis on using and expanding the use of performance-based logistics. Mr. Kendall's white paper goes so far as to say, "We believe there is opportunity for more progress in expanding the use of PBL, and it will be receiving additional emphasis and management attention going forward" (Kendall, 2014a, p. 5).

I. FEDERAL ACQUISITION REGULATION

The Federal Acquisition Regulation (FAR) is the primary regulation for use by all Federal Executive agencies in their acquisition of supplies and services with appropriated funds (General Services Administration, 2005). With its 52 different parts and appendix, the FAR is a massive regulation. Originally published in 1984, the most recent version of the FAR (published in March 2005) is issued within applicable laws, under the joint authorities of the Administrator of General Services, the Secretary of Defense, and the Administrator for the National Aeronautics and Space Administration. The content of the FAR follows the broad policy guidelines of the Administrator, Office of Federal Procurement Policy, Office of Management and Budget.

J.   TITLE 10, UNITED STATES CODE 2337

In an effort to control life cycle costs, Congress passed the National Defense Authorization Act of 2010 stating that, "The Secretary of Defense shall require that each major weapon system be supported by a product support manager (PSM)…to…maximize value to the Department of Defense by providing the best possible product support outcomes at the lowest operations and support cost" (NDAA for Fiscal Year 2010, 2009, sect. 805, para. b1). The U.S. Code, 10 USC 2337 defined the responsibilities for the PSM, as follows (Life Cycle Management and Product Support, 2013):

- Develop and implement a comprehensive product support strategy for the weapon system.
- Use appropriate predictive analysis and modeling tools that can improve material availability and reliability, increase operational availability rates, and reduce operation and sustainment costs.
- Conduct appropriate cost analyses to validate the product support strategy, including cost-benefit analyses.
- Ensure achievement of desired product support outcomes, through development and implementation of appropriate product support arrangements.
- Adjust performance requirements and resource allocations across product support integrators and product support providers, as necessary to optimize implementation of the product support strategy.
- Periodically review product support arrangements between the product support integrators and product support providers, to ensure the arrangements are consistent with the overall product support strategy.
- Prior to each change in the product support strategy or every five years, whichever occurs first, revalidate any business-case analysis performed in support of the product support strategy.
- Ensure that the product support strategy maximizes small business participation at the appropriate tiers; and
- Ensure that product support arrangements for the weapon system describe how such arrangements will ensure efficient procurement, management, and allocation of Government-owned parts inventories, in order to prevent unnecessary procurements of such parts.

K. DIRECTIVE TYPE MEMORANDUM 10-015: REQUIREMENTS FOR LIFE-CYCLE MANAGEMENT AND PRODUCT SUPPORT

DTM 10-015 was issued in October of 2010, updated in April of 2011, and canceled in November of 2013 with the issuance of the interim DODI 5000.02. DTM 10–015 required the assignment of a Product Support Manager for ACAT I and II programs and defined the roles of that assignment, which mirrored what Congress passed in the National Defense Authorization Act of 2010 (USD (AT&L), 2011a).

L. SUMMARY

As previously stated, a study of past and present literature was critical to understanding the defense acquisition system. First, a review of the GAO reports found that the changes over time have resulted in limited success with reducing the time and effort needed to review documentation (GAO, 2015b).

Next, a study of the new DODI 5000.02 confirmed that although guidance allows programs to tailor regulatory requirements and procedures to improve efficiency, they sometimes found it too difficult to obtain waivers for milestone requirements. Finally, a study of the BBP initiatives found that BBP 3.0 places emphasis on using and expanding the use of performance-based logistics.

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III. ANALYSIS

This chapter continues the examination of the literature introduced in Chapter II, while also studying the stakeholders' interview responses, in order to answer each of the primary and secondary research questions. The primary research question involves a comparison between the planned efficiencies gained and the actual efficiencies gained. This data and analysis are presented in Section B. The two secondary research questions require an internal analysis of the new instruction, to include an analysis of how well the program offices have implemented the changes from the old instruction. The data and analysis pertaining to the secondary research questions are presented in Section C.

A. QUALITATIVE STRUCTURED INTERVIEWS

The qualitative structured interviews were conducted with four experts in the defense acquisition field. The four professionals included a Deputy Program Executive Officer (Acquisition), an Assistant Program Executive Officer (Logistics), an ACAT I Product Support Manager, and an ACAT I Technical Director for Logistics. They were selected through industry contacts based on their interest in participation. The time commitment was significant (45–60 minutes), as the researcher met individually with each of the four individuals to accomplish the semi-structured interview. All four of the participants agreed to be recorded, and the recordings were analyzed for themes patterns, differences and discrepancies.

1. Interview Questions

The interviews were semi-structured, and guided by the following four research questions:

- For the program or programs that you oversee, have you incorporated the new instruction, and if so, did you find improvements in efficiency or productivity?
- How has the new instruction impacted your program level activities?
- What are some of the practical differences for program office execution of acquisition process using the new instruction, including documentation?
- Are processes any more or any less rigid than before the issuance of Interim DODI 5000.02?

2. Summary of Interviews

Throughout the interviews, there were five common themes that surfaced, including cost, competition, the PSM, the new acquisition models, and increased oversight (see Table 2).

Table 2.   Common Themes during Interviews

Common Themes in Interviews	Occurrence
Cost	4 of 4
Competition in Acquisitions	3 of 4
Product Support Manager	3 of 4
Acquisition Models	2 of 4
Increased Oversight	2 of 4

B. PRIMARY RESEARCH QUESTIONS: ANALYSIS OF THE DIFFERENCES BETWEEN PLANNED EFFICIENCIES AND ACTUAL EFFICIENCIES

The Merriam-Webster dictionary defines efficiency as, "…the ability to do something or produce something without wasting materials, time, or energy: the quality or degree of being efficient" (Merriam-Webster, 2015). In order to compare the planned efficiencies to the actual efficiencies, one must know the planned efficiencies were. This presented a problem, as the new efficiencies were not been defined, and there are no specific measures of performance (MOPs). No mention of the definition of the efficiencies or the MOPs was found in the literature review, including, the new order, white papers, sound bites or press releases.

None of the interview participants could identify any new efficiency(ies), but perhaps this was a result of the lack of definition of the planned efficiencies, or the related MOPs. The closest semblance to a definition of an efficiency and MOP was a general goal. The Defense Procurement and Acquisition Policy Directorate stated that the new order "will support effective strategic management of services across the DOD, contributing to the achievement of greater efficiency and productivity in Defense spending, as detailed in USD (AT&L)'s BBP 2.0 initiative" (Director, Defense Procurement and Acquisition Policy, n.d., p. 3).

Due to the lack of definition of efficiencies or MOPs, and only high-level, general goals, this research will define buying power and group BBP 2.0's focus areas into efficiency categories related to the defense acquisition program' cost, schedule, and performance.

The GAO defines buying power as "the amount of goods or services that can be purchased given a specified level of funding" (GAO, 2015c, p. 14). Clearly, buying power is how much stuff can be bought with a given amount of funds. When a program can purchase more without an increase in cost, the program has gained buying power. Subsequently, when the price of the product rises, without an increase in quantity of the product, the program has lost buying power.

As Table 3 shows, the seven focus areas can be tied to a specific efficiency. Of particular note, the focus areas are not mutually exclusive, and any gain in one area can, and should be a catalyst for a gain in another area. For example, an elimination of an unproductive process could lead to a reduction in costs, helping achieve affordable programs.

Table 3.   BBP 2.0 Focus Areas and Efficiency Categories

Focus Area	Efficiency Area
Achieve Affordable Programs	Cost
Control Costs Throughout the Product Life cycle	Cost
Incentivize Productivity and Innovation in Industry and Government	Performance
Eliminate Unproductive Processes and Bureaucracy	Schedule
Promote Effective Competition	Cost
Improve Tradecraft in Acquisition of Services	Performance
Improve the Professionalism of the Total Acquisition Workforce	Schedule

This table organizes the efficiencies in terms of "areas." With the efficiency areas defined, it is possible to analyze the data from the area to determine if any efficiencies have been realized. (The actual criterion for each of the areas is necessary to measure how good or bad a difference is. For example, the new instruction may aim to "Eliminate Unproductive Processes and Bureaucracy," by an MOP average improvement in schedule of six months (MOP) to "meet" the criterion. Anything better or worse than the six-month goal would have to be defined as better or worse. This is the responsibility of policy makers, and cannot be determined by the researcher.)

1. Efficiency Area: Cost

Controlling costs reigns supreme in acquisition program management priorities. As of December 2014, the DOD's portfolio of MDAPs included 78 programs with a total estimated acquisition cost of roughly $1.4 trillion (GAO, 2015b). Three of the seven BBP 2.0 focus areas focus directly on cost. Even though the other four focus areas focus more on other efficiency areas, they have direct and indirect impact on cost (e.g., longer schedule often results in higher costs). All four interview participants spoke about costs. The new instruction echoes BBP 2.0's emphasis on costs, and provides guidance on the use of "should-cost" from the beginning of the acquisition life-cycle, through contract negotiations, program execution, and life cycle sustainment (DOD, 2015).

"Should-cost" is a new term, not used in the old instruction, and mentioned 24 times in the new instruction, with a couple of paragraphs dedicated to the term in the Program Management enclosure (DOD, 2015). Secretary of Defense Carter, while still serving as the USD AT&L, defined should-cost as "a tool to manage all costs throughout the life cycle…to constrain our requirements appetites in order to control the final product unit and sustainment costs" (Carter, 2011, p. 1) This reference to the *cost per final product unit* is the definition of buying power.

As reviewed in Chapter II, the GAO reported in March 2015 that 41 of the 78 MDAPs lost buying power this year with a result of an additional $5.3 billion in costs (GAO, 2015c). When assessed against the first full year estimates, the total cost of the 2014 portfolio has increased by over $457 billion (GAO, 2015c). With a thorough understanding the implications of this data, it was possible to determine that there have not been any cost savings due to the new instruction, at least, not to date.

2. Efficiency Area: Schedule

Schedule delays have been a constant theme in the annual GAO assessment of DOD weapon system acquisitions since 2006. The current average schedule delay is more than 29 months, or over 36 percent, and these increases are proportionally higher than those seen in past assessments (GAO, 2015c).

a. *The Effect of Oversight on Schedule Efficiency*

The amount of oversight of the program offices was a major theme that was uncovered during the interviews. As Figure 9 shows, there is a very rigid vertical chain of command with many intermediaries between the program offices and their MDAs. This problem is further exacerbated because many different functional organizations within each level that perform reviews, depending on the information. Furthermore, being a vertical hierarchy, the information being reviewed does not flow up to the next level until it is approved at the current rung of the ladder.

Figure 9.   DOD Levels of Reviewing Information Requirements (from GAO, 2015b)

The DOD is well aware that its extensive review process is a challenge. A DOD study in 2011 highlighted the many organizational levels of oversight and reported that DOD has a "checkers checking checkers" system, which contributes to inefficiencies that can undermine program managers' execution of programs (Defense Business Board, 2011). The study stated this is because the program offices must spend too much time complying with the oversight process, including documenting the information requirements. This is backed up by a recent finding from the GAO that reported program offices took on average of more than two years to complete information requirements, with a review process that could include as many as 56 stakeholders, across eight organizational levels above the program office (Garamone, 2013).

The elimination of unproductive processes and bureaucracy is one of the BBP 3.0 initiatives. Mr. Kendall's white paper points out that, "left to their own devices, staffs…will…inject themselves in the acquisition chain of command" (Kendall, 2014a, p. 7). While this is an ongoing struggle that is acknowledged by all levels, there is no evidence that the new instruction has done anything to improve the process and system. In fact, there are new required reviews, such as the CDD Validation and Development RFP Decision prior to MS B. The new RFP Decision is described by the USD AT&L as, "the most important single decision point in the entire life cycle, because the release of the Engineering and Manufacturing Development RFP sets in motion everything that follows in a products' life cycle" (Kendall, 2013a, p. 1). The USD AT&L emphasis on this may cause a ripple effect through the chain of command (See Figure 9), of additional unnecessary (and not required) decision reviews at each level.

b.   The Effect of Competition on Schedule Efficiency

Interview participants had a very keen understanding of the effects of competition on schedules. The strict adherence to the competition clauses of the FAR, 5000.02, and BBP initiatives has put an unforeseen burden on the program offices and acquisition system. A quick search on the GAO's website reveals the GAO has rendered 68 decisions on competition clause bid protests in the first three months of 2015 (U.S. GAO, 2015). These protests prevent programs from moving forward, and bring about schedule delays.

One example provided by an interviewee was a 2014 protest of a sole-source contract to Rolls-Royce for performance-based logistics for the KC-130J propulsion system, which included engine and propeller repairs. The protestor argued that the contract improperly bundled the engine and propeller requirements and they should be competed separately (GAO, 2015a). However, the propulsion system had been maintained by Rolls-Royce since 2002, and by all accounts was a win-win for industry and the government for over a decade. The program office felt that they were getting good value and the KC-130J operators, and maintainers were happy with the support. The protest was ultimately denied by the GAO, however there were numerous effects on the program office, including:

- A contract modification had to be issued to extend the period of performance on the existing contract to cover the time it took to resolve the protest (GAO, 2015a)
- Seeing an opening, another company filed a protest on the same contract (GAO, 2015a)
- Over a year was spent by the program office and support staff working with the original protestor, trying to help them understand why the contract could only be serviced by the original equipment manufacturer (GAO, 2015a)

This point is compounded when it is understood that if the support for the propellers was un-bundled from the engines, the savings was estimated to be around $40,000, or 0.02% of the sole-source contract price. As the interviewee offered, "You are squeezing savings out of the contract, but you are increasing the burden and workload on the government with multiple contracts and competitions." And there lies the problem with strict enforcement of competition, the costs associated with the extra solicitations, selection committees, and contract management are often not considered or captured. While this is just one example, it is not uncommon in the defense acquisition system. As previously noted, the GAO issued 68 bid protest decisions in the first three months of this year (2015) (U.S. GAO, 2015).

3. Efficiency Area: Performance

Performance, from the perspective of acquisition management, is the "operational and support characteristics of the system that allow it to effectively and efficiently

perform its assigned mission over time. The support characteristics of the system include both supportability aspects of the design, and the support elements necessary for system operation" (Hagan, 2009, p. B-132). Generally speaking, the greater the performance, the greater the cost. While this research did not focus specifically on performance, there were no efficiencies in performance discovered, however there were not any deficiencies discovered in the process either.

C.   SECONDARY RESEARCH QUESTIONS: ANALYSIS OF THE NEW INSTRUCTION AND ITS IMPLEMENTATION

Secondary Research Question number one requires an in-depth look at the new instruction to determine what changes to the instruction were made to increase efficiencies. A complete list of the changes can be found in the Appendix. The new instruction authorizes and strongly encourages MDAs to tailor regulatory requirements, procedures, and decision levels based on the specifics of the product being required. However, in some instances program office attempts to obtain waivers for milestone requirements involved too much additional time and effort to comply.

The new instruction offers six program models for acquisition offices to use as a baseline to start from. While touted across-the-board as "new," some were actually just renamed. The new "Incrementally Fielded Software Intensive" program model is the same as the "BCL Acquisition Business Model," published in 2011. The interviews confirmed that the program offices have been tailoring for some time (as much as they could), the original program model offered in the old instruction, including what is now called the "Hardware Intensive" program model in the new instruction. This tailoring occurred long before the publishing of the new instruction. However, one interview participant did convey that in the future, program offices will have the regulatory authorization to tailor their acquisition models, and will no longer need to produce justification for that action.

Secondary Research Question number two dealt with uncovering any roadblocks to implementing the new instruction. While the new instruction provides new decision points and offers tailor-ability of the models, most interviewees considered the new

instruction as just a revision of old policy, with the Better Buying Power initiatives woven in. All interview participants had a strong grasp on the new instruction and did not see any roadblocks with incorporating the new policies. This is interesting, because if the experts do not see anything as different, especially as it pertains to greater efficiency and productivity, then there is potentially an indication of a real problem that could be any one or a combination of factors that include:

- The workforce needs training in the new instruction
- The program offices are not paying attention to the intent of the new instruction, or
- The new instruction misses the mark and does not provide any new efficiencies.

These possibilities are discussed further in Chapter IV.

D.   SUMMARY

The continued examination of the literature discussed that the lack of definition or MOPs for the planned efficiencies from the new instruction. The primary research question focus on the comparison between the planned efficiencies gained and the actual efficiencies gained uncovered that none of the interview participants could identify any new efficiencies. However, the identification of seven focus areas included an analysis that tied each of them to a specific efficiency.

An analysis of the first of the two secondary research questions found that although the instruction authorizes and strongly encourages MDAs to tailor regulatory requirements, but in some instances it required too much additional time and effort to comply. The six program models offered as new were found to be similar to previous versions. However, new regulatory authorization to tailor acquisition models may eliminate the need to produce justification for that action.

Secondary Research Question number two dealt with uncovering any roadblocks to implementing the new instruction. All interview participants had a strong grasp on the new instruction and did not see any roadblocks with incorporating the new policies. The experts do not appear to see many differences between the new and old guidance, and the examination of why is discussed further in Chapter IV.

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IV. CONCLUSIONS, RECOMMENDATIONS, SUMMARY AND AREAS FOR FURTHER RESEARCH

In the acquisition community, efforts to make the defense acquisition process more streamlined have been met with appreciation. Still, potential conflicts could loom down the line as program managers work to implement a process that hinges on critical thinking, the construction of business case analyses and deliberate decision-making—potentially time-consuming exercises—rather than adherence to specific rules as in the past (Corrin, 2015).

A.   CONCLUSIONS

The findings of this research lead to several conclusions about the Defense Acquisition System, the policies that govern it, and the new 5000.02 in particular. This research concludes that there is no empirical evidence that demonstrates that the new DODI 5000.02 will increase the efficiency of the defense acquisition system. The research shows the opposite, and in fact, program offices are more constrained than before. The new instruction adds 74 pages of regulation, two new decision points, and has not removed any burden on the program offices. These new decision points will only increase bureaucratic oversight on the program offices, increasing their workloads and costs. Some key findings that support this conclusion are as follows:

First, the efficiencies and greater productivity expressed by the USD (AT&L) have not been defined, and are left for interpretation. As studied in this research, if the efficiencies were planned to be decreased costs and reduced schedule time, they have not yet been achieved.

While the new order provides regulatory approval for MDAs to tailor their programs as they see fit, they are still bound to the burdensome statutory requirements. The interview participants confirmed that any the program tailored waiver process would in some cases be more burdensome as complying with the original policy.

Secondly, the majority of acquisition programs were found to have lost buying power in 2014. It can be argued that there has not yet been enough time to measure the

new order's effects. However, the Interim 5000.02 was issued in November 2013, and Better Buying Power 2.0 was issued a full year before. It has been two and a half years since the efficiency initiatives have been mandated. In light of the recent GAO reports, and when measured against the efficiencies of cost and schedule, there are no efficiencies reported to date.

Finally, the defense acquisition system appears to need reform. Though not the intent of this research, one can conclude that the desired acquisition system cannot be brought to fruition through white papers and instruction rewrites. A complete overhaul of the system will be needed to bring about the efficiencies envisioned in the Packard Commission, which are still the goal.

B. RECOMMENDATIONS

The literature indicated that the new order efficiencies need to be defined. The new instruction took more than a year to write and publish for the acquisition community. This massive effort appears unfinished, since the community is unsure what the effects of this new instruction are. A white paper from the office of the USD (AT&L) explaining what the efficiencies are would be a starting point. Once the efficiencies are defined, the method of measuring these efficiencies (MOPs) also needs to be defined. Table 3 in Chapter III above may be the beginnings of a model that could help define and lay out MOPs.

Secondly, the new decision points will require time and resources. The time needed to prepare for the decisions at each level of the bureaucracy needs to be understood. Along with the time, there are costs tied to these reviews and decision points. As program offices prepare for newly leveled requirements, schedules will slip and costs will rise.

The authors of the new instruction did not appear to consider how those offices already in the acquisition cycle would be impacted. It is recommended that any new acquisition policy address how the community will implement the policy. Simply canceling an old policy and ordering the use of a new one, leads to confusion.

Thirdly, once the efficiencies are defined, they need to be measured. The development of meaningful metrics is the single most important function in process improvement. If you don't know where you're going, as the adage goes, how will you know when you get there (Etem, 2013)? One interview participant offered that DOD measures schedule the wrong way. This stakeholder offered that the way DOD currently measures schedule is by reaching the program's published Initial Operating Capability (IOC) date. IOC is defined as "being attained when some units and/or organizations in the force structure scheduled to receive a system have received it and have the ability to employ and maintain it" (Hagan, 2009, p. B-88) The specifics for any particular system's IOC are defined in that system's Capabilities Development Document (CDD).

Once an IOC is defined, program offices generally work backwards from there to determine the acquisition schedule. Instead, perhaps acquisition programs should be grouped by technical type and sophistication. For example, when using the program models offered in the new instruction, group all hardware intensive acquisition programs together, and measure the time it took each program to get through the five acquisition phases (see Figure 10). (Note: All of the data used in the following section is "dummy" data, used for illustrative purposes, and do not represent any real-world programs.)
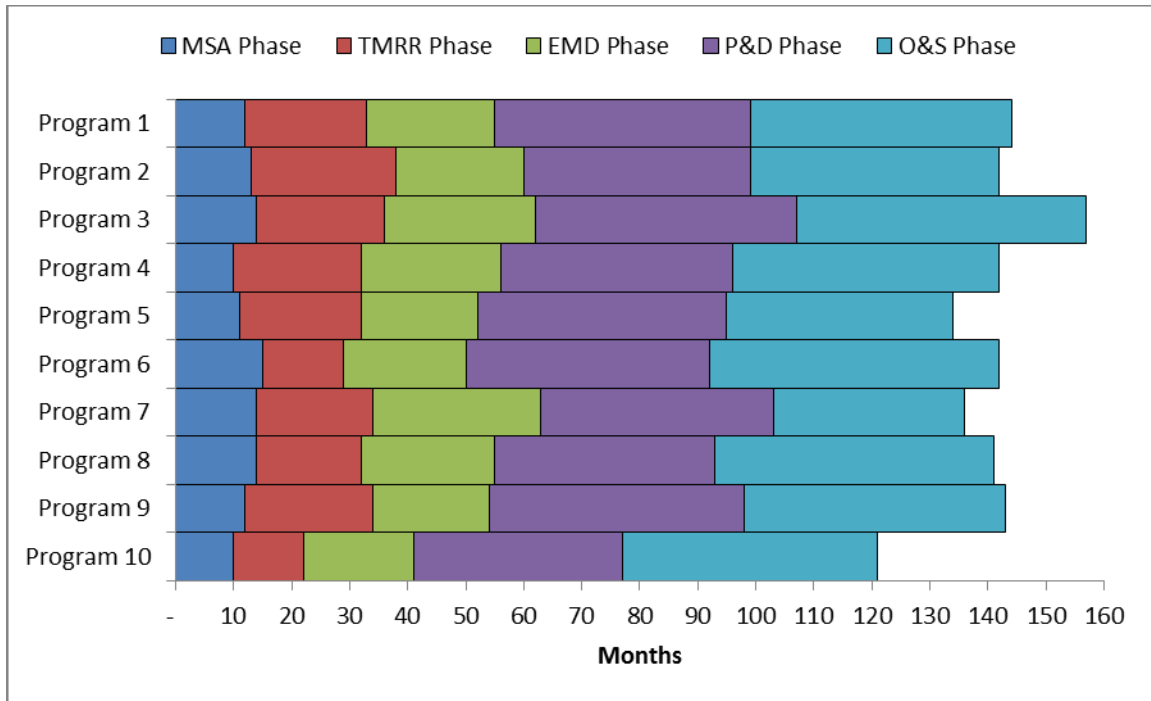
Figure 10.   Program Timelines

From this data, the average, minimum, and maximum times to complete each phase can be grouped (see Table 4).

Table 4.   Program Times in Acquisition Phases

Program	MSA Phase	TMRR Phase	EMD Phase	P&D Phase	O&S Phase
Program 1	12	21	22	44	45
Program 2	13	25	22	39	43
Program 3	14	22	26	45	50
Program 4	10	22	24	40	46
Program 5	11	21	20	43	39
Program 6	15	14	21	42	50
Program 7	14	20	29	40	33
Program 8	14	18	23	38	48
Program 9	12	22	20	44	45
Program 10	10	12	19	36	44
Min Value	**10**	**12**	**19**	**36**	**33**
Max Value	**15**	**25**	**29**	**45**	**50**
Average	**13**	**20**	**23**	**41**	**44**

Then, a baseline can be determined based on past history and how long a new program should take to get through the acquisition model (see Figure 11). Using the baselines for comparison, programs can be measured and targets for improvement can be identified.

Figure 11.   Baseline Program Timeline

While simple, this is a top-level measurement tool, with clear, practical utility for optimizing acquisition program schedules.
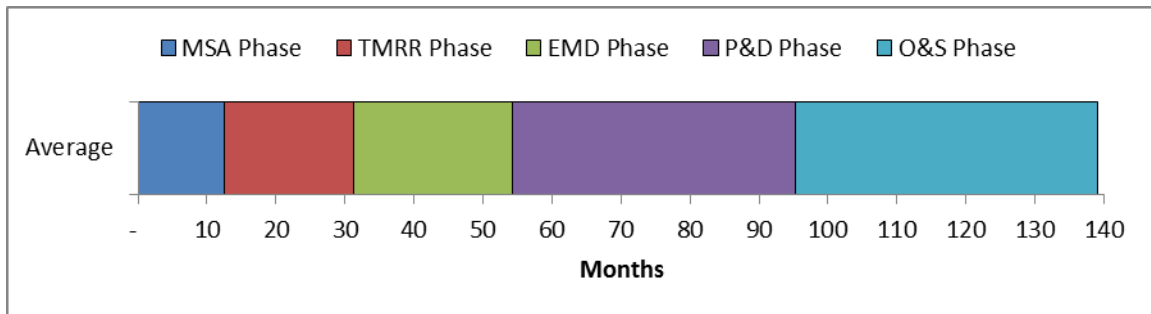
C.   OTHER FINDINGS

In the course of this research, another finding has emerged in the logistics field of acquisition management. Enclosure 6 of the new instruction, "Life-Cycle Sustainment," is completely new to the 5000.02. While the old instruction had the topic of logistics sprinkled throughout, the new instruction dedicates an entire enclosure to the topic. This has been met with enthusiasm within the logistics field. As one interview participant offered, "Logistics is now a focus in acquisition."

The new instruction directs that the Program Manager, with the support of the Product Support Manager, develop a product support strategy that will employ should-cost analysis and metrics (DOD, 2015). As described in Chapter II, the position of the PSM was written into law in 2010, in an effort to control the costs of acquisition products over their entire lifespan, cradle to grave. The addition of the Life-Cycle Sustainment enclosure to the new order does more than just incorporate new legislation since the issuance of the old order. It brings the logistics community to the forefront of defense

acquisitions. Over 70% of life-cycle costs come after the acquisition, when the system is in operation and sustainment (O & S) (GAO, 2012). Any efficiency gained in O & S would pay dividends to the total acquisition system.

D.   SUMMARY

This research provides an analysis of the new 5000.02 and the instruction's ability to deliver greater efficiency and productivity to defense acquisition programs. The 2015 instruction has been compared and contrasted with the 2008 version, to identify the pertinent changes as they pertain to increased efficiency. The Better Buying Power initiatives have also been examined.

Although the new instruction incorporated various other acquisition regulations and echoes the desires of controlled costs and delivery schedules of Better Buying Power, there is a large gap between the issuance of these specific rules and efficient acquisition programs. The new instruction does not bring the DOD's acquisition system any closer to the efficient model that has been sought since the Packard Commission, and the problematic characteristics of an "increasingly bureaucratic and overregulated process" remain. (President's Blue Ribbon Commission on Defense Management, 1986, p. 44) The defense acquisition system needs reform.

E.   AREAS FOR FURTHER RESEARCH

The development of this research has brought to light several areas for further research. First, a study of the importance of should-cost is necessary, including a determination of whether it should be used as a metric for acquisition programs. While should-cost is a new term in defense acquisition, the concept is not. More research on "should-cost" as a metric would provide insight to the acquisition community on a topic that is still not fully understood.

Secondly, the development of a baseline for acquisition timelines would be valuable to the acquisition community. It is recommended that the blueprint provided above should be used as a template to gather the data to populate the charts and formulate the average baseline for the various acquisition models.

Also, the entire review and information requirements process above the program office level is fertile ground for further research. Former USD (AT&L) and recently appointed Secretary of Defense Ashton Carter has stated that this is specifically an agenda item for him. He plans to work with the House Arms Service Committee to reduce the amount of red tape that program managers have to contend with (McLeary, 2015). Any relief to the program offices would pay dividends, as these reviews and data calls take time and resources from an already overstressed acquisition system.

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APPENDIX. DODI 5000.02: DIFFERENCES BETWEEN THE 2008 (OLD) AND 2015 (NEW) VERSIONS

The summary of changes reported in this appendix is built from the Defense Acquisition University's PowerPoint on the subject (DAU, 2014).

- The Integrated Test & Evaluation enclosure in the 2008 version was modified and expanded to focus on OT&E. The new instruction added a new enclosure for DT&E.

- The Resource Estimation enclosure in the 2008 version was expanded to a more detailed enclosure for Cost Estimating and Reporting, and a new enclosure was added for the Analysis of Alternatives (AoA).

- A new enclosure, Affordability and Investment Constraints, was added and emphasis was placed upon affordability throughout the life-cycle discussion.

- A new enclosure was added for Life-Cycle Sustainment Planning.

- The new instruction has removed emphasis on the term "evolutionary acquisition." However, the new instruction maintains emphasis on providing incremental capabilities, particularly for software intensive systems.

- The new instruction places strong emphasis on the development of Request for Proposals (RFP) prior to release.

- The new instruction provides six program models for milestones (as opposed to one model in 2008), other decision points, as well as a new process for acquisition of urgent needs.

- The new instruction deletes blocks for "User Needs" and "Technology Opportunities and Resources" linked to the material development decision (MDD) on the 2008 model.

- The new instruction requires full funding in Future Years Defense Program (FYDP) at each milestone (MS), starting at MS A.

- The new instruction provides a revised tabular listing of required information items.

- The new instruction updates program dollar thresholds for ACAT I, IA and II programs to FY2014 constant dollars

A. CHANGES TO MILESTONES AND OTHER MAJOR DECISION POINTS

(1) Material Development Decision

The new instruction added the additional requirement for Major Defense Acquisition Programs for an approved AOA Study Plan and approval for the Study Guidance by the Director, Cost Assessment and Program Evaluation.

(2) Milestone A

- Added the requirement for *should cost* management targets.
- Deleted the Technology Development Strategy, and added the Acquisition Strategy.
- Deleted the Test & Evaluation Strategy, and added the Test and Evaluation Master Plan (TEMP).

(3) Capabilities Development Document (CDD)

- The new instruction added that validation of the CDD is a requirements authority decision point prior to the Development RFP Release decision.
- The new instruction clarifies that all non-key performance parameters (KPP) requirements are subject to cost-performance trades and adjustments in order to meet affordability and/or schedule constraints.

(4) Development RFP Release Decision Point

- The new instruction makes this the new name for the Pre-Engineering and Manufacturing Development (EMD) point.
- This decision point authorizes release of RFP and source selection for EMD, and determination of preliminary low-rate initial production (LRIP) quantities.

(5)   Milestone B

- The new instruction added the requirement to demonstrate compliance with affordability goals for production and sustainment via an independent cost estimate (ICE).

- The new instruction provided authorization for MDA approval of advanced procurement of long lead production items for LRIP, or full production.

- The new instruction deleted post-critical design review assessment.

(6)   Milestone C

- The new instruction changed the purpose of MS C from authorizing entry into LRIP, to authorizing entry into Production and Deployment.

- The new instruction deleted, "…MDA shall make the decision to commit the Department of Defense to production at Milestone C…" and added a provision for combining Milestones B and C for high-cost first articles, such as ships and spacecraft that typically do not produce prototypes during EMD.

(7)   Full-Rate Production or Full Deployment Decision

- The new instruction added explanatory text for this decision point. The MDA will consider any new validated threat environments that might affect operational effectiveness, and may consult with the requirements authority to ensure capability requirements are current.

- The new instruction changed "Beyond LRIP Report" name to "DOT&E Report on Initial Operational Test and Evaluation."

B.   CHANGES TO ACQUISITION PHASES

(1)   Materiel Solutions Analysis (MSA) Phase

- The new instruction added the requirement to select a Program Manager (PM) and establish a Program Office prior to MS A.

- During MSA, the new instruction also added the requirement for the component combat developer to prepare an Operational Mode Summary/Mission Profile (OMS/MP) that will include the operational tasks, events, durations, frequency, operating conditions and environment in which the recommended materiel solution is to perform during each mission and each phase of a mission. The OMS/MP is to be provided to the PM and to industry as an attachment for the next RFP.

(2) Technology Maturation and Risk Reduction (TMRR) Phase

- The new instruction replaces the previously named, "Technology Development Phase" to the TMRR Phase.

- The new instruction added a decision point to validate the Capability Development Document (CDD).

- The new instruction also added the requirement for the PM to finalize sustainment requirements for the Preliminary Design Review (PDR).

- The Development RFP Release decision point was also added to this phase.

(3) Engineering and Manufacturing Development (EMD) Phase

- The new instruction provided a broader description of Developmental Testing (DT) and Operation Testing (OT) requirements.

The new instruction allowed concurrency between EMD and Production.

(4) Production and Deployment Phase

- The new instruction slightly changes the definition of LRIP to, "… establishes the initial production base for the system, provides the OT&E test articles, provides an efficient ramp up to full rate production, and maintains continuity in production pending OT&E completion."

- The new instruction changes Military Equipment Valuation to "General Equipment Valuation"* and moves description to Table 2, Milestone and Phase Information Requirements

(5) Operations and Support Phase

- The new instruction added the requirement for the PM to establish necessary organic depot maintenance capability during this phase.

C. ENCLOSURES

The new instruction includes 13 enclosures, of which five are new. Below is a brief review of their additions and/or deletions.

(1) Enclosure 1: Acquisition Program Categories and Compliance Requirements

- ACAT Thresholds: This enclosure increases thresholds for all programs and baselines them to FY 2014 constant dollars.

- Changes to Program Information: The 2008 instruction had three tables for statutory, regulatory information, and milestone requirements. Enclosure 1, Table 2 in the 2015 DODI 5000.02 consolidates all ACATs into one table for "Milestone and Phase Information Requirements."

(2) Enclosure 2: Program Management

This enclosure is seven pages and replaces enclosure ten of the 2008 version.

- This updated enclosure added the requirement that a Program Executive Officers (PEO) must have been a PM of a program comparable to the programs he/she will be responsible for as a PEO. This enclosure also added the requirement that PMs have prior experience in similar acquisition programs.

- The enclosure added descriptions of acquisition strategies, the PM's role, competition, business approach, risk management, integrating international acquisition, and exportability considerations into the acquisition strategy.

- The enclosure added Program Baseline Development and Management (includes EVM, risk management, cost baseline control and use of "should cost")

- The enclosure also provided descriptions of the structure of a Program Office and a Joint Program Office.

- The enclosure added Intellectual Property (IP) Strategy Open Systems/Architectures and deleted Program Management Agreements.

(3)   Enclosure 3: Systems Engineering

This enclosure is eight pages and replaced enclosure 12 of the 2008 version. It added detail on the Systems Engineering Plan (SEP) and the systems engineering trade-off analysis.

(4)   Enclosure 4: Developmental Test and Evaluation (DT&E)

This enclosure is new to the 5000.02. It provided an overview of DT&E and responsibilities and includes 17 key activities of a robust DT&E program. This enclosure also requires the use of the TEMP as the primary test planning and management document.

(5)   Enclosure 5: Operational and Live Fire Test and Evaluation

This enclosure replaced enclosure six of the 2008 version. This version removes the Test and Evaluation Strategy, requiring use of the TEMP henceforth.

(6)   Enclosure 6: Life Cycle Sustainment

This enclosure is new to the 5000.02. It consolidated and added to sustainment related information in the previous instruction.

(7)   Enclosure 7: Human Systems Integration

This enclosure replaced enclosure eight of the 2008 version, however it does not introduce any new material.

(8)   Enclosure 8: Affordability Analysis and Investment Constraints

This is a new enclosure and provides an overview of affordability and information about the Life-Cycle Affordability Analysis.

(9)   Enclosure 9: Analysis of Alternatives

This is a new enclosure to the 5000.02. It consolidated and added to the AOA discussion in enclosure seven of the 2008 version.

(10)   Enclosure 10: Cost Estimation and Reporting

This enclosure replaced enclosure seven in the 2008 version. Additions include:

- Information on when DCAPE conducts ICE and independent cost analyses for MDAPs and MAIS
- Guidance for DCAPE reviews of cost estimates and analysis
- Requirement to fully-fund to the component cost position in the FYDP at MS A, B, C and Full Rate Production (FRP)
- Clarification on the relationship between the DCAPE, the DOD Components, and the PM
- Cost Analysis Requirements for multi-year acquisitions

(11)   Enclosure 11: Requirements Applicable to All Programs Containing Information Technology (IT)

This enclosure replaced enclosure five from the 2008 version. Additions include:

- Definitions of IT, and Information Systems
- Post Implementation Review (PIR)
- DOD Enterprise Architecture requirement
- Cybersecurity Strategy for all IT acquisitions

(12)   Enclosure 12: Defense Business System (DBS)

This enclosure replaces enclosure eleven in the 2008 version. This update adds revised DBS governance procedures, documentation and review requirements, and the requirement for annual re-certification.

(13)   Enclosure 13: Rapid Fielding of Capabilities

This is a new enclosure. This enclosure provides procedures and policy for the acquisition of capabilities to fulfill urgent operational needs.

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