Air Force Life Cycle Management Center (AFLCMC)

Standard Process

for

Development Planning

Process Owner: AFLCMC/XZ

Date: 20 Sep 2013

Version: 1.0

Record of Changes.

Record of Changes		
Version	Effective Date	Summary
1.0	20 Sep 2013	Standard process approved by S&P Board on 19 Sep 2013

Development Planning Process

1.0 Description: According to Department of Defense Instruction (DoDI) 5134.16, *Deputy Assistant Secretary of Defense for Systems Engineering (DASD(SE))*, Development Planning (DP) encompasses the engineering analysis and technical planning activities that provide the foundation for informed investment decisions on the fundamental path a materiel development will follow to effectively and affordably meet operational needs.

1.1 DP consists of three principal processes:

1.1.1 **Capability Planning and Analysis (CP&A).** CP&A is the process to assess operational capability needs versus the "art of the possible" regarding existing and potential materiel and Concepts of Operation (CONOPS) solution sets.

1.1.2 **Concept Development (CD).** CD is the process to develop concepts during early planning and mature the concept using early systems engineering. The lead DP organization directs the materiel provider's early systems engineering (SE) pre-MDD and pre-Milestone A (MSA); and serves to bridge the warfighter, acquisition program offices, and the Science & Technology (S&T) communities. As a core responsibility, the lead DP organization collaborates regularly with DoD agencies, Air Force Major Commands (MAJCOMs), Air Staff, industry, academia, and research laboratories.

1.1.3 **Materiel Solution Analysis leading to Milesone A.** Although this is considered a principal DP process it is not included in this version of the DP Standard Process, but will be added in a future version.

1.2 While this is an AFLCMC standard process, DP and the organizations that conduct DP fall under the DP Governance Structure, led by the Vice Commanders for Air Force Materiel Command (AFMC) and Air Force Space Command (AFSPC). To achieve standardization of the process across the entire DP community, this DP process applies to AFMC for non-space DP efforts and AFSPC for space DP efforts.

1.2.1 This standard process applies to DP organizations performing DP prior to establishment of a Program of Record (POR) and to Program Offices that perform DP in support of modifications to a POR (an existing weapon or business system) that lead to an MDD.

1.2.2 This standard process includes activities for AFLCMC when an operational MAJCOM (ACC, AMC, etc.) or Headquarters Air Force (HAF) formally requests support for a DP effort.

1.2.3 This standard process applies to organizations performing DP across AFLCMC and interfacing with AFSPC and Air Force Nuclear Weapons Center (AFNWC) DP processes

2.0 Purpose: The overall goal of DP is to consistently launch high-confidence acquisition programs responsive to requirements that emerge from the Joint Capability Integration and Development System (JCIDS) process for Weapon Systems and the Business Capability Lifecycle (BCL) process for DBS. The DP process directly supports AFLCMC Strategic Objective 3, *Launch High-Confidence, Sustainable Programs*.

3.0 Potential Entry/Exit Criteria and Inputs/Outputs. The following list documents the regular entry and exit criteria for a particular DP effort, but can be tailored based on the necessity of the items.

3.1 Entry Criteria: Operational MAJCOM/HAF Request Form for Planned Effort or major modification proposals (example AF Form 1067)

3.2 Exit Criteria: Delivery of required DP products to support informed acquisition decision

3.3 Inputs:

3.3.1 For CP&A DP efforts

3.3.1.1 National strategies

3.3.1.2 Core Function Master Plans (CFMPs)

3.3.1.3 Intelligence and Threat studies

3.3.1.4 Existing Initial Capabilities Documents (ICDs), Capabilities Based Assessment (CBA), and studies

3.3.2 For CD DP efforts

3.3.2.1 Concepts of Operations (CONOPS)

3.3.2.2 ICDs

3.3.2.3 Problem Statements (PSs) (for DBS)

3.3.2.4 Candidate Solutions

3.3.2.5 Initial measures of military utility

3.3.2.6 Milestone Decision Authority (MDA) authority to conduct Analysis of Alternatives (AoA)

3.4 Outputs:

3.4.1 For CP&A DP efforts

3.4.1.1 DP Proposals

3.4.1.2 Situational Awareness Assessments

3.4.1.3 Long Range Capability Assessments

3.4.1.4 Advanced Concept Studies/Analyses Assessments

3.4.1.5 Capability Development Roadmaps

3.4.1.6 Initial Technology Guidance

3.4.1.7 Validated CONOPS

3.4.1.8 Materiel Solution Information to support the CBA and development of the ICD

3.4.1.9 For DBS, Materiel Solution Information to support the Business Capability Definition (BCD) and development of the PS

3.4.1.10 Program Objectives Memorandum (POM) Cost estimates

3.4.2 For CD DP efforts

3.4.2.1 Concept Characterization Technical Descriptions (CCTDs) and Business Cases

3.4.2.2 Analysis of Alternatives (AoA) Study Plans

3.4.2.3 Materiel solution information to support MDD

3.4.2.4 MDD Acquisition Decision Memorandum (ADM) signed by the MDA

4.0 Process Workflow and Activities.

4.1 Supplier, Inputs, Process, Outputs, and Customers (SIPOC), Table 1. The SIPOC outlines the key interactions and interfaces associated with the DP process. The items detailed in **Table 1** below are not necessary for every DP effort and can be tailored based on the specifics of the project.

4.2 Process Flowchart. The high level process flowchart below, **Figure 1**, represents the DP process flow from MAJCOM/HAF DP request to MDD. Because of the dynamic nature of DP, this process is meant to accommodate multiple perspectives and situations. This process is not meant to be prescriptive, but instead can be tailored to the specific DP effort. To further delineate the interaction between the DP SPEs and the PEOs, **Figure 2** was created to describe how the DP SPEs and Program Offices process DP requests. There are two SPEs: AFSPC/A5X for space efforts and AFLCMC/XZ for non-space efforts (includes Weapon systems, Cyber, and DBS efforts).

4.3 Work Breakdown Structure (WBS). The WBS in **Table 2** below provides additional detail (to level WBS level 3) corresponding to individual DP activities depicted in the flowchart in **Figure 1**. For a complete detailed WBS in MS Excel see **Attachment 1.**

4.4 Additional work tables, figures, or checklists. Additional detailed process flowcharts are provided at **Attachment 2**.

Table 1. Supplier, Inputs, Process, Outputs, and Customers (SIPOC) for DP

Supplier	**I**nputs	**P**rocess	**O**utputs	**C**ustomer(s)
MAJCOMs/ HAF/DP Orgs	MAJCOM/ HAF DP Requests; Program Office Modification Proposals	**1.1** DP Lead Organization Assignment	DP Lead Organization Assignment	AFLCMC/XZA/C/W; AFNWC/XZ; SMC/AD; PEOs
MAJCOMs/ HAF/DP Orgs/AFRL	MAJCOM/ HAF DP Request; Program Office Modification Proposals	**1.2** Inform DP effort Request, develop Proposal, and prioritize DP effort for funding	DP Proposals; CY Prioritized RAM Funded DP effort List; Funded Program Office DP efforts	MAJCOMs; AFLCMC/XZA/C/W; AFNWC/XZ; SMC/AD; PEOs; AFRL
MAJCOMs/ HAF/DP Orgs/AFRL	National Strategies, CFMPs, Capabilities Baselines; Intelligence & Threat Studies; existing CBAs/BCDs	**1.3** Conduct Capability Portfolio Analysis	Capability Development Roadmaps; Long Range Capability Analysis Reports; Advanced Concepts Studies; Initial Technology Needs Guidance	MAJCOMs; AFLCMC/XZA/C/W; AFNWC/XZ; SMC/AD; PEOs; AFRL
MAJCOMs/ HAF /AFRL	QDR; DPG; CRA; GDEF; JCAs; National Strategies; CFMPs; CONOPS; Advanced Technology efforts; Previous CBAs & Studies; Prioritized Capability Gaps; Technology Needs and Investment Strategies; Draft ICD/PS	**1.4** Support CONOPS, CBA/BCD & ICD/PS/DCR Development/ Approval	Validated CONOPS, CBA/BCD & ICD/PS/DCR	MAJCOM/ HAF
MAJCOM/ HAF/DP Orgs/AFRL	Analytical Key Scenarios and Evaluation Criteria; Security & Acquisition Protection Requirements	**1.5** Develop Security Guidance & DP Support Plan	Coordinated and Approved Tailored DP Program Protection and Security Classification Guidance; Precursor to MSA Program Protection Planning	AFLCMC/XZA/C/W; AFNWC/XZ; SMC/AD; PEOs;
Concept Engineering Team(s), MAJCOMs, S&T Orgs, Universities, AFRL, Industry, DTIC	DP Effort Proposal; Capstone Requirements Document; CONOPs; Candidate Solutions; Downselect Criteria; ICDs; PSs; Initial Measures of Military Utility; Well-defined Analytical Key Scenarios and Evaluation Criteria	**1.6** Perform Concept Exploration and Refinement (early SE)	Lessons Learned; Cooperative Opportunities; Approved Concept Solutions or Concept Characterization & Technical Descriptions (CCTDs); Concept Repository; Select DoD Architecture Framework (DoDAF) Products; AoA Inputs	MAJCOMs/ HAF
MAJCOM Study Lead, Study Team Leads	MDA Direction to Conduct AoA; DCAPE AoA Study Guidance; AoA Study Team Director and Membership (WIPT) Selection; OAS AoA Training for Study Team; CBA & BCD Results, ICD, PS, CCTD(s)	**1.7** Support Development of Study Plan Review Process and Study Plan Schedule	Finalized, Coordinated, Approved AoA Study Plan	MAJCOM Study Lead, Study Team
MAJCOMs SAF/AQ, AF/A8	Approved AoA Study Plan	**1.8** Support MDD Review	Information to Support MDD	SAF/AQ, AF/A5R, AF/A8P, OSD, PEO

Figure 1. High Level DP Process Flowchart

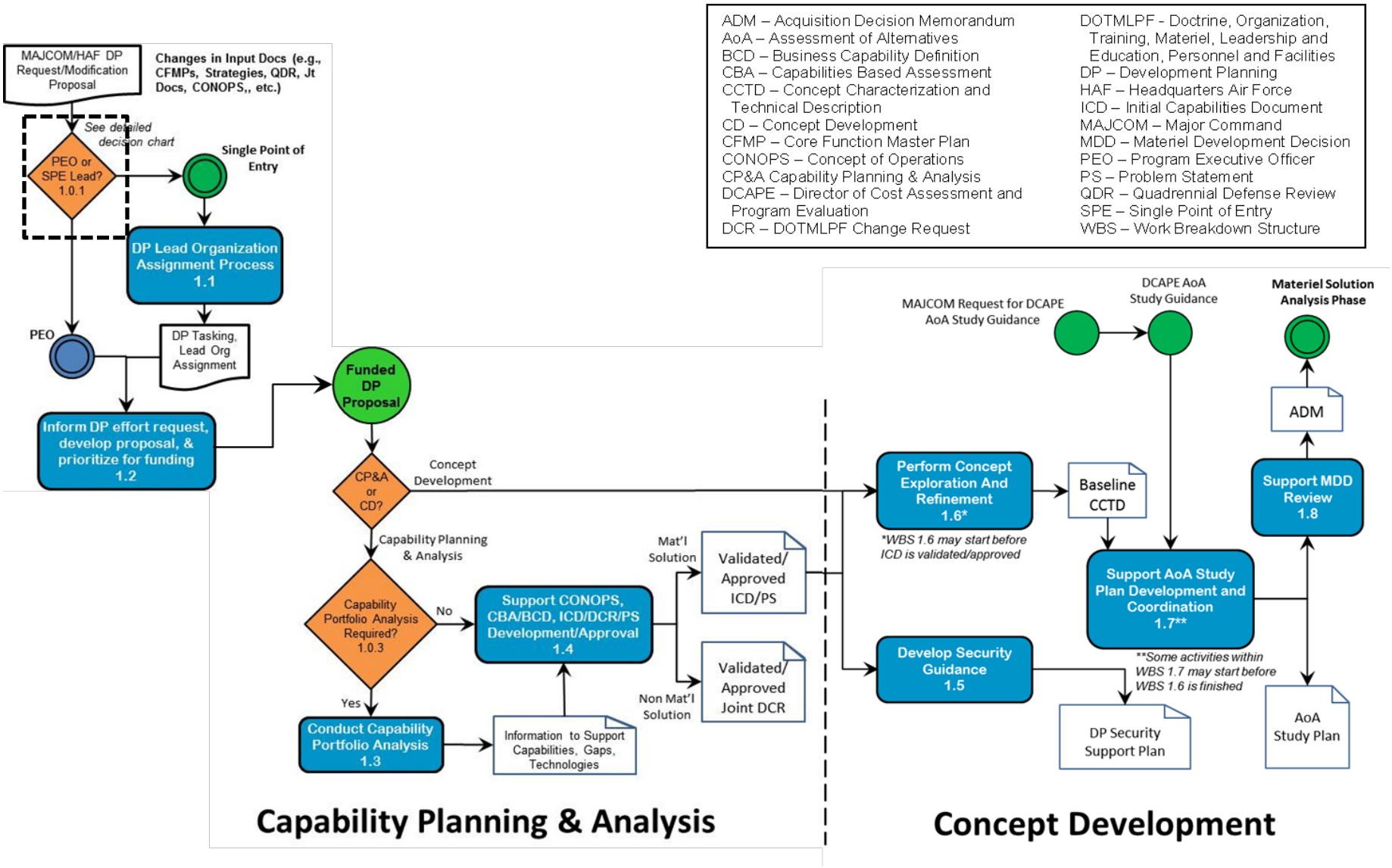
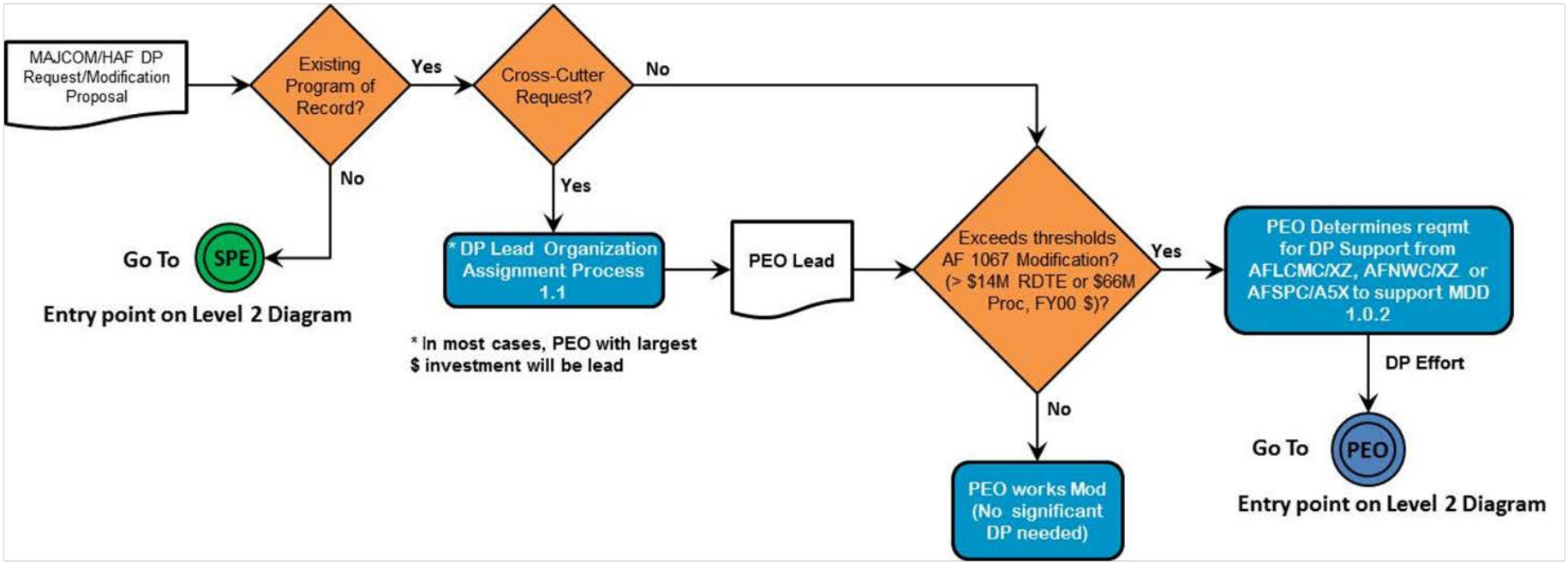


Figure 2. Single Point of Entry and PEO Relationship for Processing DP Requests



Note: Working with XP to integrate DP Mission Assignment

Table 2. Development Planning (DP) Work Breakdown Structure (WBS)

Lvl	WBS	Activity	Description	OPR
1	1.0	Capability Planning & Analysis (CP&A) and Concept Development	Includes both CP&A and Concept Development activities: CP&A is done to support Capability planning. Activities include developing Situational Awareness Assessments that will support future capability planning efforts, supporting the MAJCOMS in performing Long Range Capability Assessments that assess current capabilities in emerging/future operations environments, and doing Advanced Concept Studies/Analyses Assessments to transition technology. Another important activity is the development of Capability Development Roadmaps and other materiel related information to support the MAJCOMs in developing the Core Function Master Plans (CFMPs). Concept Development Activities scope the trade space associated with the gaps/shortfalls identified in the ICD and begins the development of prospective materiel solutions at the beginning of the acquisition life cycle to enhance the quality and fidelity of proposed future military system concepts. These activities usually lead to a Materiel Development Decision (MDD). For Defense Business Systems (DBS), CP&A begins with a Business Capability Definition (BCD) Phase focused on the analysis of a perceived business problem, capability gap, or opportunity (referred to as "business need"). The BCD phase ends at an MDD.	AFLCMC/XZA/C/W/HIQD; AFNWC/XZ; SMC/AD; PEOs
3	1.0.1	DP Single Point of Entry (SPE) & PEO Processing of DP requests	For DP requests (MAJCOM/HAF DP requests and Modification Proposals for new capabilities) for which there is no Program of Record (POR): The SPE (either AFLCMC/XZ for non-space or AFSPC/A5X for space efforts) will review the request and determine the lead DP organization. For DP requests for which there is a POR: If the request is for a Cross-Cutter (Multiple PEOs required), the SPE (AFLCMC/XZ for non-space or AFSPC/A5X for space) will follow the DP Lead Assignment Process (1.1) to determine the Lead PEO. In most cases, the PEO with the largest $ investment in the proposed effort will be the lead. If the DP request for modification (for new capabilities) is less than the AF 1067 threshold then the lead PEO organization will work the Modification. (In most cases, no significant DP is required.) If the DP request for modification for new capabilities exceeds the AF 1067 Threshold then a Materiel Development Decision (MDD) will be required. The lead PEO organization will work with the appropriate SPE to determine the level of support needed from the AFLCMC/XZ, AFNWC/XZ, or SMC/AD organizations to augment the PEO team in areas such as Requirements analysis, Trade space analysis, Modeling and Simulation, Trade Studies support, etc. to support the MDD.	AFLCMC/XZ AFSPC/A5X, and PEOs

3	1.0.2	PEO Determines Requirements for DP Support from AFLCMC/XZ, AFNWC/XZ or SMC/AD to support MDD	The lead PEO organization will contact the appropriate SPE (O-6 to O-6) to determine the level of support needed from the AFLCMC/XZ, AFNWC/XZ, or organizations to augment the PEO team in areas such as Requirements analysis, Trade space analysis, Modeling and Simulation, Trade Studies support, etc. to support the MDD. This activity results in the identification of additional requirements (organic and dollars) to support the MDD. These additional requirements for support will be an input to the DP Proposal that lays out the timelines and resources needed to perform the effort.	PEOs
3	1.0.3	Determine if a capability portfolio analysis is required	This decision point determines if the necessary information to support capabilities, gaps, and technologies analyses exists to develop the CONOPS, CBA/BCD, and ICD/DCR/PS. The necessary information includes situational awareness assessments, long range capability assessments, advanced concept studies/analyses assessments, and capability development roadmaps.	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
2	**1.1**	**DP Lead Center Assignment Process**	These activities identify the DP Lead Center (AFLCMC/XZA/C/W; SMC/AD, AFNWC/XZ, or Program Office) that will work the DP request. DP Requests can be in the format of a DP request form or a Program Office Modification Proposal such as an AF 1067 form. The process to determine the lead DP organization is collaboration between the DP Single Point of Entry (SPE) organizations and the Program Offices. (See Figure 2).	AFLCMC/XZI; AFSPC/A5X
3	1.1.1	Receive DP Effort Request		
3	1.1.2	Telecon to understand DP Request/Requirement		
3	1.1.3	Draft Initial Lead Center Recommendation		
3	1.1.4	Coordinate Initial Lead Center Recommendation		
3	1.1.5	Gain Consensus on Lead Center Recommendation		
3	1.1.6	O-6 Adjudication with HQ AFMC/A2/5 or HQ AFSPC/A5		
3	1.1.7	AFLCMC/XZ releases tasking identifying Lead Center and requesting Capability Materiel Team (CMT) POCs		
2	**1.2**	**Inform DP effort request, develop proposal, and prioritize DP effort for funding**	This element includes the activities to understand and provide feedback to the DP Effort Request and then develop, staff, and approve the DP Proposal. In addition, this element contains the activities to prioritize the DP effort for funding. The DP Team or 'Capability Materiel Team' is a multi-disciplined team of SMEs from appropriate organizations including but not limited to sponsoring MAJCOM, engineering, product support, financial management, modeling and simulation, intel, test, S&T, etc.	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
3	1.2.1	Establish DP Team and Assess requirements		
3	1.2.2	Develop DP effort Proposal		
3	1.2.3	Obtain DP Proposal Approval		
3	1.2.4	Prioritize for DP funding - Go/No Go Decision		
2	**1.3**	**Conduct capability portfolio analysis**	Activities to provide materiel and analytical support to Capability Planning. Activities include developing Situational Awareness Assessments, Long Range Capability Assessments, and Advanced Concept Studies/Analyses Assessments . Also includes activities to develop Capability Development Roadmaps and other materiel related information to support the MAJCOMs in developing the Core Function Master Plans (CFMPs).	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
3	1.3.1	Maintain Situational Awareness of Current/Emerging/Future Ops Environment		
3	1.3.2	Support Generation of Long Range Capability Analysis		

3	1.3.3	Conduct Assessment of Advanced Concepts Studies/Analysis		
3	1.3.4	Evaluate Technology Opportunities		
3	1.3.5	Support Development/Update of CFLI Capability Development Roadmaps/ CFMP inputs		
2	**1.4**	**Support CONOPS, CBA, BCD, & ICD/Problem Statement/DCR development/ approval**	The CBA is the analytic basis of the JCIDS process. It identifies capability needs and gaps, and recommends non-materiel or materiel approaches to address gaps. A CBA may be based on an approved Joint Concept; a CONOPS endorsed by the JROC, a combatant command, Service, or defense agency; the results of a SWarF; or an identified operational need. It becomes the basis for validating capability needs and results in the potential development and deployment of new or improved capabilities. The CBA can result in either an ICD or a DCR, or both. Defense Business Systems (DBS) apply the Business Capability Lifecycle (BCL) model as the acquisition process in lieu of JCIDS. The Business Capability Definition (BCD) Phase for DBS focuses on the analysis of a perceived business problem, capability gap, or opportunity (referred to as "business need"). BCD Phase results in a Problem Statement (PS) which may include a DCR.	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
3	1.4.1	Construct Analytical Frame of Reference for CONOPS Development		
3	1.4.2	Schedule CBA/BCD Support		
3	1.4.3	Support initial preparation for CBA or BCD Phase for DBS		
3	1.4.4	Support defining the need		
3	1.4.5	Assess the need		
3	1.4.6	Examine solution type		
3	1.4.7	Support Requirements Strategy Development		
3	1.4.8	Support Requirements Strategy Review (RSR)		
3	1.4.9	Support Requirements Development HPT		
3	1.4.10	Support O-6 Level finalized baseline ICD/DCR Review		
3	1.4.11	Support ICD/DCR Validation/ Approval		
3	1.4.12	Provide budget input for MSA Phase support		
2	**1.5**	**Develop Security Guidance**	Conduct acquisition protection planning by identifying potential technologies envisioned during the DP phase; reviewing and analyzing current (S&T), (R&D), Special Access Programs (SAP), and Acquisition projects/programs with similar technologies. The next process is to determine which of these existing protection measures are applicable; and identify any shortfalls (if any). Upon completion of identifying any shortfalls, tailored program protection guidance is developed that encompasses classification management, CPI identification, Computer Security (COMPUSEC), Information, Personnel and Physical security management. The next crucial process is to provide training and disseminate this tailored program protection and security classification guidance to all project/program personnel, including DoD contractors. Finally, initiate program protection planning to MS A.	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
3	1.5.1	Perform acquisition protection planning		
3	1.5.2	Research existing protection measures; extract applicable guidance		
3	1.5.3	Determine potential shortfalls to existing protection measures; identify new protection requirements		
3	1.5.4	Develop tailored development program protection and security classification guidance (if required)		
3	1.5.5	Coordinate & approve tailored DP Program Protection & Security Classification Guidance		

2	**1.6**	**Perform concept exploration and refinement**	Concept Exploration and Refinement (CER), also known as Early Systems Engineering, scopes the trade space associated with the gaps/shortfalls identified in the ICD (or Problem Statement for DBS) and begins the development of prospective materiel solutions at the beginning of the acquisition life cycle to enhance the quality and fidelity of proposed future military system concepts that may eventually be considered in an AoA. Analytical data (e.g., parametric study results, performance curves, etc.) generated during these activities populate the knowledge base for concepts being explored.	AFLCMC/XZA/C/W/HIQD; SMC/AD, AFNWC/XZ, or PEOs
3	1.6.1	Perform early systems engineering planning		
3	1.6.2	Research candidate cooperative opportunities solution set		
3	1.6.3	Perform tradespace characterization		
3	1.6.4	Perform candidate solution sets characterization		
3	1.6.5	Perform implementation analysis		
3	1.6.6	Provide support to pre-OIPT PSR of draft CCTD		
3	1.6.7	Provide support for Product Support Management		
3	1.6.8	Provide support for Intel Analysis		
3	1.6.9	Finalize CCTDs		
3	1.6.10	Coordinate and approve CCTDs		
2	**1.7**	**Support AoA Study Plan Development and Coordination**	The AoA Study Plan presents the background, direction, goals, methodologies, tools, schedule, and other elements of the AoA. The Study Plan establishes a roadmap of how the analysis must proceed, who is responsible for the different elements, and why they are doing it.	AFLCMC/XZA/C/W/HI; SMC/AD, AFNWC/XR, or PEOs
3	1.7.1	Support development of Study Plan review process and Study Plan schedule		
3	1.7.2	Support initial AoA Study Plan preparation		
3	1.7.3	Support initial AoA analysis planning		
3	1.7.4	AoA Study Plan documentation		
3	1.7.5	AoA Study Plan review/approval		
2	**1.8**	**Support MDD Review**	Provide acquisition related information to support Materiel Development Decision (MDD) (ROM Cost Strategy, Resource Strategy, Entrance Criteria for next Program Milestone, Preliminary Acquisition Strategy, etc.)	AFLCMC/XZA/C/W/HI; SMC/AD, AFNWC/XR, or PEOs
3	1.8.1	Assemble MDD Information and Entrance Criteria and Identify Major Players/ Stakeholders		
3	1.8.2	Support Draft MDD Briefing		
3	1.8.3	Manage Approval Process to Proceed to MDD		
3	1.8.4	Conduct MDD Review		

5.0 Measurement. As with any process, measures need to be put in place to ensure consistency and effectiveness of the process. DP has developed two different areas of metrics to measure this effectiveness. Paragraphs 5.1 and 5.2 outline the suggested metrics associated with the DP process.

5.1 Process Metrics

	Activity	***Scope of Activity***	***Metric***
1	Space and non-Space SPE to process DP request and identify lead DP organization	• Receive request • Determine lead organization • Identify relevant additional stakeholder organizations Done by AFLCMC/XZA/C/W, AFNWC/XZ, SMC/AD, or Program offices	# of DP requests processed on-time (10 business days is objective). Goal is 90% on-time.
2	Develop DP Proposal Done by AFLCMC/XZA/C/W, AFNWC/XZ, SMC/AD, and Program Offices)	• CMT-developed • Schedule to include all activities to complete document for submission to appropriate SPE for MAJCOM approval • Measure on *FINAL* IMS Schedule – based on Finalized Scope and Resources agreed to by originator and DP organization • Only done for proposals that go through the SPE	# of proposals developed on-time; goal is 90% on-time.
3	Develop, Coordinate and Approve CCTDs	• CMT-developed • Schedule to include all activities to complete document • Measure on *FINAL* IMS Schedule – based on Finalized Scope and Resources agreed to by originator and DP organization • Action Officer (AO) Review of Draft CCTD • Coordination of Final CCTD (O-6-Level) • Technical Authority Approval of CCTD (For AFLCMC, the AFLCMC/XZ Director Of Engineering is the Technical Authority)	# of CCTDs completed on-time; goal is 90% on-time. # of CCTDs approved within 6 calendar weeks; goal is 90% on-time.

5.2 Health of DP Metrics

	Pre-MDD DP Process Characteristic	***Evaluation Areas***	***Metrics (T: "Threshold" DP portfolio; O: "Objective DP portfolio)***	***Notes***
1	DP Return on Investment (ROI)**	Measure value provided to customers by quantifying estimated ROI for DP efforts • Estimated prior to DP project kickoff • Assessed after DP project completion	Metric based on ability of DP to reduce program risk in two ways: • Reduce risk of false start or program termination • Reduce risk of overrun for continued program	ROI equals Estimated cost avoidance divided by the Cost of the DP effort

	Pre-MDD DP Process Characteristic	***Evaluation Areas***	***Metrics (T: "Threshold" DP portfolio; O: "Objective DP portfolio)***	***Notes***
2	Quality of the delivered DP project to the customer	Quality of the delivered DP products (materiel info to support CBA/ICD/PS, CCTDs, etc.)	Quality Delivered (Scale from 0 to 100%)	Quality rating is determined by the customer (MAJCOM, HAF, or PM)
3	Quality of DP effort to support MDD **	Adequacy of DP documentation presented at MDD to be able to document the following: • Materiel solutions effectively address gaps, attributes, and dependencies • Range of technically feasible solutions from across solution space • Near-term opportunities considered • Plan for staffing and funding to support proposed milestone entry	Rate of DP effort successfully passing MDD without having significant re-work. Significant re-work is defined as requiring more than 2 weeks of re-work to be ready to return for MDA approval. Goal should be pass rate of 80%	MDD documentation (e.g., CCTDs, AoA Study Guidance, ICD, etc.)

** Reported to AFLCMC/CC

6.0 Roles and Responsibilities.

6.1 AFLCMC PEOs are responsible to:

6.1.1 Plan for systems within their portfolios

6.1.2 Integrate systems within the larger SoS context

6.1.3 Maintain awareness of emerging gaps that may be supported through their portfolios

6.1.4 Inform and be aware of technology planning and investments

6.1.5 Plan / advocate enterprise common solutions

6.1.6 Provide insight / support to AFLCMC/XZ and AFNWC/XZ to help inform emerging gaps and potential solutions

6.1.7 Provide support / resources to the DP role within their portfolio

6.1.8 Serve as liaison to AFLCMC/XZ for DP issues / activities

6.2 AFLCMC/XZ is responsible to:

6.2.1 Serve as the integration lead for all non-space DP efforts (SPE) in collaboration with Test Centers, AFRL, and acquisition intelligence

6.2.2 Execute DP efforts not being executed within a PEO portfolio within the scope below

6.2.3 Support Air Superiority, Global Persistent Attack, Command and Control, Cyber Superiority, Agile Combat Support, Rapid Global Mobility, Personnel Recovery, Building Partnerships, and Global Integrated ISR DP efforts.

6.2.4 Address cross cutting issues that impact multiple PEOs

6.2.5 Integrate systems within a System of Systems / capability context

6.2.6 Serve as the liaison between collateral and Special Access Programs (SAP) activities (assistant to AFLCMC/CC)

6.2.7 Work with functional home offices as appropriate to provide processes and tools to aid in DP efforts across the acquisition enterprise

6.2.8 Serve as the Center POC to SAF/AQR in their DP roles

6.2.9 Serve as the acquisition enterprise experts for DP

6.2.10 Lead Technology Transition efforts

6.3 AFNWC/XZ is responsible to:

6.3.1 Execute DP efforts not being executed within a PEO portfolio within the scope below

6.3.2 Support Nuclear Deterrence Operations (NDO) and Global Precision Attack (GPA) Chemical, Biological, Radiological, Nuclear (CBRN) DP efforts.

6.3.3 Integrate systems within a System of Systems / capability context

6.3.4 Serve as the liaison between collateral and Special Access Programs (SAP) activities (assistant to AFNWC/CC) for NDO DP efforts

6.3.5 Work with functional home offices as appropriate to provide processes and tools to aid in DP efforts across the acquisition enterprise

6.3.6 Serve as the NDO and GPA CBRN Center POC to SAF/AQR in their DP roles

6.4 HQ AFSPC/A5X is responsible to:

6.4.1 Serve as the integration lead for all space DP efforts (SPE)

6.5 SMC/AD is responsible to:

6.5.1 Execute DP efforts not being executed within a PEO portfolio within the scope below

6.5.2 Support Space Superiority (SS) DP efforts

6.5.3 Integrate systems within a System of Systems / capability context

6.5.4 Serve as the liaison between collateral and Special Access Programs (SAP) activities (assistant to AFLCMC/CC) for SS DP efforts

6.5.5 Work with functional home offices as appropriate to provide processes and tools to aid in DP efforts across the acquisition enterprise

6.5.6 Serve as the SS Center POC to SAF/AQR in their DP roles

6.6 Functional owners* are responsible to:

6.6.1 Provide training to ensure the necessary skills are available to execute DP projects

6.6.2 Ensure the necessary business practices exist and are being utilized to support the DP projects

6.6.3 Provide functional unique DP tools and infrastructure

6.6.4 Maintain cognizance over emerging DP needs to ensure processes and people are equipped to respond

6.6.5 Support the execution of processes in support of DP—cost estimating, Concept Characterization and Technical Documents (CCTDs), Technology Readiness Reviews (TRR), etc.

** Functional owners in this instance include the primary Center functional offices: EN/EZ, PK/PZ, FM/FZ, LG/LZ (includes Product Support), AQ, AZ (includes T&E), as well as acquisition intelligence and acquisition security*

6.7 AFLCMC/XP is responsible for:

6.7.1 The mission assignment process for graduating DP projects

6.7.2 Consistent capture of functional processes

6.7.3 Integration of processes for domain-wide execution

6.7.4 Leading integrated manpower planning to include new work

7.0 Tools.

7.1 SharePoint. AFLCMC/XZ maintains the following SharePoint site: https://cs.eis.afmc.af.mil/sites/AFMCDP/default.aspx

8.0 Training.

8.1 SYS 105 - Introduction to Development Planning **(**AFIT Course). This course provides an introduction to AFMC's development planning history, process, function, policy, prioritization and governance.

8.1.1 This course provides students with a basic understanding of DP. The course will highlight the importance of early systems engineering and pre-MDD activities to help bridge the gap between the identification of a material solution and the Milestone B decision.

8.1.2 It provides a solid foundation for understanding the basics of building and acquisition program with high confidence for a successful program launch.

8.1.3 XZ assessing the development of an advanced AFIT or DAU DP course to provide process training to DP team members.

8.2 Process Training. This process will be available on the AFLCMC Process Directory. A PowerPoint presentation will be developed and will be available to educate prospective DP Team members.

8.3 Team Training. It's recommended that "Just-in-time" team training be provided to a newly formed DP team by experienced DP personnel. Ideally, this training should be provided by an organic program manager within the organization that has had years of experience directing DP teams.

9.0 Definitions, Guiding Principles or Ground Rules & Assumptions.

9.1 This standard process applies to Defense Business Systems (DBS). Traditionally, DP has focused primarily on weapon systems so documenting the DBS DP process fills an important gap. This process establishes AFLCMC/HIQD as performing DP work for DBS (just like AFLCMC/XZA performs DP for aeronautical systems).

9.2 This process does not cover the following:

9.2.1 Sustainment efforts that retain or restore existing capabilities that do not lead to an MDD

9.2.2 Fast-track requirements such as Urgent Operational Needs, Joint Urgent Operation Needs, and Urgent Need Requests

9.2.3 Technology demonstrations prioritized via the Applied Technology Councils or similar processes (e.g., Applied Technology Demonstrations (ATD)s, Joint Capability Technical Demonstrations (JCTD)s, etc.)

9.2.4 How the Requirements Analysis & Maturation (RAM) Program Element (PE) is used

9.3 Acronym list is provided at **Attachment 3**.

10.0 References to Law, Policy, Instructions or Guidance. References that relate to this process included the following:

10.1 Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H, *Joint Capability Integration and Development System (JCIDS)*, 10 Jan 12

10.2 Department of Defense Instruction (DoDI) 5000.02, *Operation of the Defense Acquisition System*, 8 Dec 08

10.3 DoDI 5134.16, *Deputy Assistant Secretary of Defense for Systems Engineering (DASD(SE))*, 19 Aug 2011

10.4 Business Capability Lifecycle Model for DBS; Directive-Type Memorandum (DTM) 11-009, *Acquisition Policy for Defense Business Systems (DBS)*

10.5 *Defense Business Systems Investment Management Process Guidance June 2012*

10.6 Air Force Instruction (AFI) 10-601, *Operational Capability Requirements Development*, 12 Jul 10

10.7 AFI 10-604, *Capabilities Based Planning*, 10 May 06

10.8 AFI 63-101, *Acquisition and Sustainment Life Cycle Management*, 7 Mar 13

10.9 *Development Planning Guide*, AFMC/A2/5, 17 Jun 10

10.10 *Early Systems Engineering Guide*, SAF/AQ, 31 Mar 09

10.11 *Concept Characterization & Technical Description (CCTD) Guide*, SAF/AQR, 27 Oct 10

10.12 *Analysis of Alternatives (AoA) Handbook*, Office of Aerospace Studies (OAS), 27 Apr 11

10.13 *Technology Readiness Assessment Guidance*, Assistant Secretary of Defense for Research and Engineering (ASD (R&E)), Apr 2011

10.14 *Manufacturing Readiness Level (MRL) Deskbook*, OSD Manufacturing Technology Program, May 2011

10.15 *Risk Management Guide for DoD Acquisition*, Department of Defense, August 2006

Attachment 1. Development Planning (DP) Work Breakdown Structure (WBS)  Development Planning Process 201	**Attachment 2.** Development Planning (DP) Process Flow Diagrams  WBS Process Flow Diagrams ver20e .ppt	**Attachment 3**. Development Planning (DP) Process Acronym List  DP Process Acronyms