Capability Development Plan (CDP)

A. Purpose

The purpose of the Capability Development Plan (CDP) is to serve as the agreement between the Component Head, the Program/Project Manager (PM), and the Acquisition Decision Authority (ADA) on the activities, cost, schedule, and performance boundaries of the work to be performed in the Analyze/Select phase leading up to ADE-2A. This critical period develops the knowledge used by the ADA to make informed decisions on the performance, schedule, and cost of a program that will effectively deliver capabilities to users.

The CDP functions for pre ADE-2A programs much in the same capacity as the APB does for post ADE-2A programs – as a tool to bound and scope critical activities in the Analyze/Select phase.

The CDP is signed by the Component ADA and the DHS ADA for ADE-1. Once the CDP is in effect, the PM should notify Component and departmental leadership in a timely fashion of significant variances in the execution of the plan of action and milestones (such as schedule slippages).

B. Overview of CDP Content

The CDP should discuss topics and issues, specific to the acquisition, that allow the PM to clearly define the “body of work” that must be accomplished during the Analyze/Select phase. The CDP includes the plan for the phase between ADE-1 and ADE0-2A. It also includes the strategies and approaches to address the key issues addressed in this Analyze/Select phase, including the approach to determining the “optimum” solution(s) within the trade-space and the risks of the preferred alternative.

The CDP provides the ADA with the assurance that the knowledge (based upon sound analytical approaches and techniques) to make informed ADE-2A acquisition decisions will be available at that milestone.
Sample Template and Guidance

CDP FORMAT and GUIDANCE

- **Cover Page**
  - A sample cover page with signature blocks is provided at the end of this appendix.

- **Record of Changes**
  - Identify changes to the CDP as they occur. Include a short description of the change, with specific reference to any schedule, resources, or risk changes encountered as the Analyze / Select phase is executed.

- **Capability Statement**
  - Identify the capability that needs to be delivered.
  - Briefly describe the capability needs/gaps that will be filled by the proposed program. These must be traceable to the P-MNS and to the MNS once it is approved. Describe any further efforts required to refine the statement of the problem and how these will be accomplished.

- **Frame the Analyze/Select Trade Space**
  - Identify the potential range of alternatives to be examined. Describe any bounds or constraints on the program such as expected time to deliver capabilities and potential resources available.
  - Risk: Describe the approach for identifying, managing, and mitigating risks (to the extent known) of potential solutions and alternatives. Describe the methods to continuously identify risks throughout the analysis activity, and how the risks for the preferred alternative will be translated into a risk management plan that will describe how they are to be mitigated (e.g., accepted, reduced, off-loaded).

- **Plan of Actions and Milestones**
  - Identify (in the form of a table or chart) the activities, tailored from Directive 102-01 and the Instruction/Guidebook 102-01-001 (including the Systems Engineering Life Cycle (SELC) and the Supportability and Sustainment appendices), that will be performed for the period between AD-1 and ADE-2A including processes, reviews, and their resulting products. Provide an activities schedule (for example, key schedule points for the Analysis of Alternatives (AoA) process, from start to AoA report completion/brief out).

- **Participation of Users/Operators**
  - Describe how users/operators will be engaged in this phase, particularly for developing the CONOPS and ORD, and assess potential alternatives for operational utility.

- **Analysis Approach**
  - Describe the approach to the analysis.
  - Identify whether an Analysis of Alternatives (AoA) or an Alternatives Analysis (AA) is appropriate (using the criteria in the Instruction/Guidebook). For the AA, describe the materiel option to be evaluated and refined.
  - Establish the ground rules and assumptions for the AoA/AA and LCCE
  - Describe the level of detail of the AoA/AA
  - Identify the AoA/AA lead or the manner in which the AoA independent lead will be selected

- **Pilots**
  - Describe any pilots that will be conducted in this period, and how these will be managed in accordance with guidance for pilots contained in the Instruction.
Sample Template and Guidance

- **System Engineering Reviews.** Set out the ground rules for the two Systems Engineering Reviews (Study Plan Review (SPR) and the Solution Engineering Review (SER)) that are to be conducted during the Analyze/Select phase.

- **Homeland Security Enterprise Architecture (HLS EA).** Describe the approach to ensure alignment with the HLS EA and standards.

- **Technology.** Identify the approach for identifying and assessing the maturity of key technologies required and the approach to mitigate any technology maturity risk.

- **Coordination with and Dependence on other Programs /Systems.** Describe the approach for identifying systems or information sources that this capability will be required to interface with (both internal and external to DHS) to the extent known, and how the program will work with these sources. Identify the approach for identifying any other systems or programs that may contribute to meeting the need/gap and the approach to leveraging and collaborating with them (cite actual programs if known).

- **Acquisition Planning.** State the goals and ground rules that will be used to develop the acquisition plan for the proposed program to the degree known. This should include Government and contractors (support, and system development) over the life of the program (development, production, fielding, operation, and logistics) and potential mechanisms such as services acquisitions.

- **Integrated Logistics Sustainability and Support.** Describe the approach for planning for supportability and sustainment (logistics support) that will be analyzed during this phase.

- **Lifecycle Cost Estimation.** Describe the approach for developing Life Cycle Cost (LCC) estimates including assumptions, work breakdown structures, methodologies (e.g., parametric analogy, models), estimates for life cycle supportability and sustainment, and risk-based adjustments to estimates.

- **Program Management Office Resources.** Address the adequacy of Program Management Office (PMO) resources, including staff/qualifications, funding, and facilities to accomplish the above tasks. Identify critical shortfalls in resources and proposed solutions.

- **References**
  - List all references that are key to the proposed program, particularly those that pertain to the activities performed in the Analyze / Select phase of the acquisition life cycle.
Sample Template and Guidance

Capability Development Plan (CDP)
for
(PROGRAM TITLE)

Submitted by: ____________________________ ______________
Component Program Manager Date

(If Applicable)
Endorsed by: ________________________________ ______________
Partnering Program Manager Date

Endorsed by: ________________________________ ______________
Component Acquisition Executive Date

Approved by: ________________________________ ______________
Head of Component Date

Approved by: ________________________________ ______________
Acquisition Decision Authority Date