GENERAL SERVICES ADMINISTRATION Washington, DC 20405

CIO 2140.4 July 18, 2016

GSA ORDER

SUBJECT: Information Technology (IT) Solutions Life Cycle (SLC) Policy

- 1. <u>Purpose</u>. This Order sets forth policy for planning and managing IT solutions developed for or operated by GSA. This policy has been developed to assure the Solutions Life Cycle (SLC) discipline used is consistent with SLC guiding principles, acquisition planning requirements, and capital planning and investment control requirements. The term SLC replaces the term Software Development Life Cycle (SDLC) which was used in the past.
- 2. <u>Cancellation</u>. This Order cancels, CIO 2140.3 Systems Development Life Cycle Policy, dated September 29, 2006.
- 3. <u>Background.</u> In accordance with the Clinger-Cohen Act of 1996, the GSA Chief Information Officer (CIO) provides IT policy, planning, programming, and budgeting guidelines for IT investments. This guidance is consistent with acquisition management guidance in the Federal Acquisition Regulation (FAR) and GSA Acquisition Manual (GSAM).
- 4. Objectives. Objectives of this policy are to:
- a. Apply a disciplined set of SLC principles when IT solutions are planned, developed, operated, and retired;
- b. Allow SLC customization appropriate to the size and type of project, such as for solution development, system enhancement, or use of Commercial off-the-shelf (COTS) packages;
- c. Provide SLC guidance applicable to both traditional and new development methodologies including cloud, infrastructure as a service, platform as a service, software as a service, service oriented architecture, and rapid development approaches;
- d. Address business, functional, data and technical requirements, and architecture throughout the SLC;

- e. Reduce risk and project failure; identify management, acquisition, and technical issues as early as possible and track them throughout the SLC;
 - f. Foster realistic expectations of what a solution will and will not provide;
- g. Balance programmatic, technical, management, and cost aspects of the proposed solution development, modernization, or enhancement;
 - h. Measure progress and status for effective and timely corrective actions;
 - i. Support effective resource management, acquisition and budget planning; and
 - j. Help position the agency to meet current and future business requirements.

5. Applicability and scope.

- a. This policy applies to acquisition, development, maintenance, enhancement, operation, and disposal of IT systems and solutions of any size, complexity, or significance that are part of the agency's IT portfolio as defined in <u>CIO 2135.2B GSA Information Technology (IT) Capital Planning and Investment Control.</u>
- b. This policy applies to all GSA IT project managers, system owners, and other staff responsible for defining, delivering, operating, supporting, and retiring information technology-based solutions.
- c. This policy requires implementation of SLC processes and controls, appropriately scoped to ensure effective management control and authority over IT projects.
- d. This policy applies to milestone reviews that help determine whether to proceed to the next phase of the solution lifecycle.
- e. This policy does not require or forbid a specific solution development methodology. However, GSA IT strongly encourages the use of Agile practices, and alignment to the TechFAR and Digital Services Playbook (See References Section 9, Part b.), for a significant portion of the solution development lifecycle at GSA.
- f. Project management best practices pertaining to the GSA Solutions Life Cycle, can be found in the <u>Solutions Life Cycle Handbook</u>. The handbook contains templates and guidance for alternative implementation approaches for large complex projects as well as for smaller, less complex projects or for alternative development approaches.

6. Policy.

a. This policy applies to any GSA IT solution, regardless of size, complexity or significance, in all of its life cycle phases.

- b. All solution development, modernization and enhancement efforts are to follow a disciplined SLC approach. Failure to follow this SLC policy may result in unacceptable deviations from planned cost, schedule, and performance expectations, and could ultimately result in project failure or termination.
- c. All IT projects and applications or systems, whether existing, planned, or under development, must be accurately identified in the GSA Enterprise Architecture, GSA Applications Inventory, IT Investment Portfolio and technologies found in the GSA IT Standards Profile.
- 7. <u>Organizational governance responsibilities</u>. GSA IT establishes IT governance mechanisms to assure the solutions development, modernization, and enhancement of systems remain consistent with agency objectives and with the enterprise architecture.
- 8. <u>SLC guiding principles</u>. The SLC guiding principles are tenets that provide a foundation for shared understanding and application of solutions life cycle processes and procedures. SLC implementations should comply with these guiding principles:
- a. Agency IT solutions are corporate assets that must be effectively managed from inception to disposal;
- b. Disciplined SLC practices, processes, and governance are essential to effective management and control of IT solution projects;
- c. Application of disciplined SLC practices, processes, and governance practices will enable successful solution development projects which increase the quality, minimize the cost, and maximize the level of business functionality of GSA IT solutions; and
- d. Regardless of project size, complexity, risk, cost, and other factors, the basic elements of the SLC remain applicable for all IT solution projects.

9. References.

- a. Applicable policies include:
 - CIO 2105.1 GSA Section 508: Managing Information and Communications Technology (ICT) for Individuals with Disabilities
 - CIO 2135.2 GSA Information Technology (IT) Capital Planning and Investment Control
 - CIO 2110.4 GSA Enterprise Architecture Policy
 - CIO 2100.1 GSA IT Security Policy

- CIO 1820.2 GSA Records Management Program
- b. Related OMB policy, guidance, memoranda, and reference information includes:
 - Office of Management and Budget (OMB) Information Policy
 - <u>U.S. Digital Services Playbook</u>
 - <u>TechFAR Handbook</u>
 - Clinger-Cohen Act of 1996
 - Solutions Life Cycle Handbook
- c. Related <u>FAR</u> and <u>GSAM</u> references.
- 10. Signature.

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