$\begin{array}{c} {\bf 111TH~Congress} \\ {\it 2d~Session} \end{array}$ 

SENATE

REPORT 111–179

### INFORMATION TECHNOLOGY (IT) INVEST-MENT OVERSIGHT ENHANCEMENT AND WASTE PREVENTION ACT OF 2009

#### REPORT

OF THE

# COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

TO ACCOMPANY

S. 920

TO AMEND SECTION 11317 OF TITLE 40, UNITED STATES CODE, TO IMPROVE THE TRANSPARENCY OF THE STATUS OF INFORMATION TECHNOLOGY INVESTMENTS, TO REQUIRE GREATER ACCOUNTABILITY FOR COST OVERRUNS ON FEDERAL INFORMATION TECHNOLOGY INVESTMENT PROJECTS, TO IMPROVE THE PROCESSES AGENCIES IMPLEMENT TO MANAGE INFORMATION TECHNOLOGY INVESTMENTS, TO REWARD EXCELLENCE IN INFORMATION TECHNOLOGY ACQUISITION, AND FOR OTHER PURPOSES



MAY 5, 2010.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

89-010

WASHINGTON: 2010

#### COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

JOSEPH I. LIEBERMAN, Connecticut, Chairman

CARL LEVIN, Michigan
DANIEL K. AKAKA, Hawaii
THOMAS R. CARPER, Delaware
MARK L. PRYOR, Arkansas
MARY L. LANDRIEU, Louisiana
CLAIRE McCASKILL, Missouri
JON TESTER, Montana
ROLAND W. BURRIS, Illinois
EDWARD E. KAUFMAN, Delaware

SUSAN M. COLLINS, Maine TOM COBURN, Oklahoma SCOTT P. BROWN, Massachusetts JOHN McCAIN, Arizona GEORGE V. VOINOVICH, Ohio JOHN ENSIGN, Nevada LINDSEY GRAHAM, South Carolina

MICHAEL L. ALEXANDER, Staff Director KEVIN J. LANDY, Chief Counsel ADAM R. SEDGEWICK, Professional Staff Member

ERIC S. Hopkins, Professional Staff Member, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security Brandon L. Milhorn, Minority Staff Director and Chief Counsel

LISA M. NIEMAN, Minority Counsel

R. Justin Stevens, Minority Professional Staff Member, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security Trina Driessnack Tyrer, Chief Clerk

## CONTENTS

		Pag
I.	Purpose and Summary	
II.	Background and Need for Legislation	2
	Legislative History	4
IV.	Section-by-Section Analysis	4
V.	Evaluation of Regulatory Impact	12
VI.	Congressional Budget Office Cost Estimate	13
VII.	Changes in Existing Laws, as Reported	14

111TH CONGRESS 2d Session

SENATE

REPORT 111–179

INFORMATION TECHNOLOGY (IT) INVESTMENT OVER-SIGHT ENHANCEMENT AND WASTE PREVENTION ACT OF 2009

MAY 5, 2010.—Ordered to be printed

Mr. LIEBERMAN, from the Committee on Homeland Security and Governmental Affairs, submitted the following

#### REPORT

[To accompany S. 920]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 920) to amend section 11317 of title 40, United States Code, to improve the transparency of the status of information technology investments, to require greater accountability for cost overruns on Federal information technology investment projects, to improve the processes agencies implement to manage information technology investments, to reward excellence in information technology acquisition, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill do pass.

#### I. Purpose and Summary

S. 920 seeks to improve the federal government's management of its information technology projects and investments. As it stands now, the federal government spends more than \$40 billion annually on major IT investments, with the Government Accountability Office estimating that nearly one-half of the investments are poorly planned, poorly managed, or both.<sup>1</sup>

To address these problems, this bill would establish an improved process for agencies to manage and monitor progress of large IT investments. It would require agencies to take specific steps to show

 $<sup>^{-1}</sup>$ GAO-08-1051T Information Technology: OMB and Agncies Need to Improve Planning, Management, and Oversight of Projects Totaling Billions of Dollars.

sufficient planning and oversight before there is a significant investment in money; measure whether the investment is achieving expected cost, schedule, and performance targets; report to the Office of Management and Budget and to Congress if a project is experiencing significant problems; and terminate investments that fail to meet cost, schedule, and performance targets.

#### II. BACKGROUND AND NEED FOR THE LEGISLATION

Since 2006, the Committee's Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security has held several hearings on the federal government's information technology acquisition planning and management. These hearings, along with a number of Government Accountability Office (GAO) reports, have shown that it is difficult for stakeholders to stay informed of major Federal IT investments, which total billions of dollars each year. For instance, many agencies fail to define why an investment is needed, provide incomplete and inaccurate planning documents for the investment, and insufficiently manage investments according to established standards and best practices. In addition, many project managers lack the resources and knowledge necessary to effectively plan and manage complex IT investments.

This bill would establish reporting requirements to inform agency senior managers, OMB, and Congress when an investment is facing critical problems that could negatively impact the success of the project. Furthermore, the legislation is intended to give agencies help in properly planning and managing projects, so that they

can correct unanticipated problems before a project fails.

An example of the type of project that would have cost less and produced better results had this bill's provisions been in law is the Census Bureau's investment in automating the 2010 Decennial Census. Automation of the 2010 Decennial Census was a major acquisition project that required the purchase and management of systems, equipment (including handheld computers), and infrastructure for field staff to use in collecting data for the 2010 Census. The Census Bureau initially estimated it would cost \$600 million for the technology necessary to automate the project. However, the automation project had to be significantly changed after project managers realized the investment was not proceeding as planned and would not meet its goals for cost and performance.

In 2007, the Census Bureau determined that it would not be fea-

In 2007, the Census Bureau determined that it would not be feasible to use the handheld computers in the non-response follow-up (NRFU) portion of the 2010 Decennial Census, its largest field operation, and that it would accordingly need to revert to a paper-based system. The Bureau estimated that reverting to a paper-based NRFU, but still using handheld computers for address canvassing (which determines residences to receive the Census questionnaire), would result in a cost increase of the life-cycle cost of the 2010 Decennial Census of between \$2.2 billion and \$3 billion in addition to the previously reported estimate of \$11.5 billion. Further, the automation contract itself was renegotiated in the fall of 2008 and is now expected to total around \$790 million nearly one-third more than the original estimate. Despite this increase in contract cost, the Bureau has reverted to a paper-based NRFU and will be conducting some of the automation in-house, such as the

help desk, support, and some software development. Moving these functions in-house is expected to cost the Bureau \$97 million.

Had the IT Investment Oversight Enhancement and Waste Prevention Act of 2009 been enacted prior to the 2010 Decennial Census automation contract, the project would have been considered a core IT investment at the Census Bureau, and the project would have undergone an independent cost estimate for the full lifecycle of the project. Then, quarterly reports on the project's cost, schedule, and performance would have been required. With these additional planning and monitoring steps in place, the Bureau likely would have identified these cost and performance problems in time to prevent some of the failures. These mistakes likely led to the need to pay an additional \$1 billion dollars to revert the 2010 Decennial Census process to a paper-based system that will limit the use of the handheld computers, reduce the accuracy of the Decennial Census, and unnecessarily waste taxpayer money.2

GAO found that one of the major contributing factors to federal IT investment failures is that agencies continually change the originally planned price tag and delivery date for IT investments, which essentially masks overall cost, schedule, and performance problems.<sup>3</sup> Under S. 920, agencies will have to measure progress from the original cost, schedule, and performance baselines to avoid situations where senior managers and Congress are limited in their

ability to fully examine the life cycle cost of an investment.

The bill also requires each agency, in coordination with OMB, to identify and report to Congress what it considers to be its core IT investments. Core IT investments are defined as investments that are a high-dollar value relative to the rest of the IT investments undertaken by that agency, critical to the successful mission of the agency, and/or incorporate technologies that may be unproven or not fully developed. Once core IT investment projects are identified, agencies must report annually to Congress on the projects' primary business case and key functional requirements. The bill also requires the agency head to review the primary business case and core functionality requirements quarterly and notify Congress of any changes within 14 days of the end of each quarter. The agency head must also provide an interim report notifying Congress of how the changes will affect the cost and ultimate effectiveness of the investment.

The bill creates two reporting thresholds that the Committee believes will help inform Congress about major IT investments that are experiencing serious problems. To do this, the bill uses the earned value management system (EVM)<sup>4</sup> developed by the American National Standards Institute, and used throughout the industry to manage IT investments. An EVM system is an index that takes into account cost, schedule, and performance of an IT project. In S. 920, an investment is considered to have crossed reporting thresholds if it: (1) "significantly deviates" from the original EVM

July 2008).

4 Earned Value Management Systems (ANSI/EIA 748–B), Copyright© (2007), Information Technology Association of America. All Rights Reserved. Reprinted by Permission.

<sup>&</sup>lt;sup>2</sup>Testimony before the United States House of Representatives Committee on Oversight and Government Reform April 9, 2008. "Progress on the development of the Field Data Collection automation program and the Decennial Response Integration System." Accessed December 10, 2009 at http://oversight.house.gov/images/stories/documents/20081219175944.pdft.

3 Information Technology: Agencies Need to Establish Comprehensive Policies to Address Changes to Projects' Cost, Schedule, and Performance Goals, GAO-08-925 (Washington, D.C.:

baseline by 20 percent, or (2) "grossly deviates" from the original EVM baseline by 40 percent. If an investment significantly deviates, then the agency head will have to report to Congress and GAO, providing information such as the date the deviation determination was made, the amount of the cost increases and the extent of schedule delays, as well as changes in the project's requirements and reasonable alternatives to the investment. If a project grossly deviates, the agency will have to provide a more detailed report to Congress and GAO, conduct specific project analyses, develop a new baseline for the project, and designate the project as a core IT investment.

#### III. LEGISLATIVE HISTORY

Senator Carper introduced S. 920 on April 28, 2009. The bill was read twice and referred to the Committee on Homeland Security and Governmental Affairs. Chairman Lieberman, Ranking Minority Member Collins and Senator Voinovich cosponsored S. 920.

The Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security held a hearing on April 28, 2009, titled, "Government 2.0: Transitioning America into the 21st Century and a Digital Future." The Committee received testimony from the Honorable Vivek Kundra, Administrator, Office of Electronic Government and Information Technology and Federal Chief Information Officer; David Powner, Director, Information Technology Issues, U.S. Government Accountability Office; The Honorable Karen Evans, former Administrator for Electronic Government and Information Technology (OMB); and Phillip Bond, President and Chief Executive Officer of TechAmerica. The witnesses focused their testimony on the need for agencies to be more transparent with their investments in order to better manage cost, schedule, and performance. In addition, the witnesses agreed that agencies need to better implement the principles of Earned Value Management in order to reduce the risk of cost overruns and schedule delays.

The Committee considered S. 920 on May 20, 2009, adopted the Carper substitute amendment, and ordered the bill reported favorably, both by unanimous consent. Members present for consideration of both the substitute amendment and the bill were Chairman Lieberman; Senators, Akaka, Carper, Pryor, McCaskill, and Burris; Ranking Minority Member Collins; and Senators Coburn, and Voinovich.

#### IV. SECTION-BY-SECTION ANALYSIS

Section 1. Short title

Section 1 designates the name of the Act as the "Information Technology Investment Oversight Enhancement and Waste Prevention Act of 2009."

Section 2. Findings

Section 2 states Congress' findings with respect to Federal IT investments, including that agencies have struggled with high risk and complex IT investments and that Congress has historically been caught off-guard by IT investments that seemed like they were on budget, but ended up costing taxpayers hundreds of mil-

lions of dollars more than expected. The findings also state Congress' belief that OMB can help better inform Congress and the American taxpayers of the true costs and status of IT investments through mechanisms that provide real time project management information and force agencies to improve the accuracy and reliability of project management information.

#### Section 3. Real-time transparency of IT investment projects

Section 3 requires the Office of Management and Budget to establish and maintain a website that will provide accurate information on the status of all major IT investments. The website, also known as a "dashboard," will show current and projected future cost, schedule, and performance information. OMB and federal agencies can use the website to cost-effectively satisfy the reporting requirements established in the bill. Congress can also use the website to track progress of major IT investments and identify when those investments may be falling behind the cost, schedule, and performance expectations of the project. It is the intent of the Committee that, based on the successful implementation of the website, OMB should expand the website to include information on other major capital investments including, but not limited to, weapons acquisitions, satellites, construction projects, and environmental cleanup.

#### Section 4. IT Investments projects

#### Subsection 4(a) Significant and Gross Deviations

Section 4(a) amends Section 11317 of Title 40, United States Code. The section-by-section analysis (subsections a through f) below refers to the new Section 11317, as amended by this bill.

#### Subsection (a) Definitions

Paragraph (a)(1) defines the term "agency head" as the person within the agency primarily responsible for the information technology investment.

Paragraph (a)(2) defines the "ANSI EIA 748 B standard" by cross referencing a standard jointly established by the American National Standards Institute and the Electronic Industries Alliance. That standard lays out several best practice guidelines that government project managers should follow if an investment is to be delivered within an acceptable cost and schedule. For example, the standard requires that project managers break investments into smaller, more manageable deliverables, and then, as the project progresses, measure whether the investment is meeting the expected deliverables. The standard is seen by project management experts as one of the most effective ways to manage risk and reduce cost and schedule overruns.

Paragraph (a)(3) identifies the congressional committees to which the bill directs reports required under it.

Paragraph (a)(4) states that the Chief Information Officer (CIO) at the Department level agency is primarily responsible for the IT project under review.

Paragraph (a)(5) defines "core IT investment project" as an IT investment project that the CIO, with approval of the agency head, designates as such. The designation criteria, further detailed in

paragraph (b), include: the project's criticality to the mission, high-dollar value, use of unproven technologies and/or risk of a significant negative impact to the agency if the project fails, relative to the other major IT investments in the agency. The CIO and agency head are the individuals most intimately familiar with the various IT projects and mission of the agency, so they are in the best position to determine which projects are most critical and risky to their agency. Thus, the CIO and agency head are tasked with the responsibility to identity these projects.

Paragraph (a)(6) states that the term "Director" refers to the Di-

rector of the Office of Management and Budget.

Paragraph (a)(7) defines the term "Earned Value Management" (EVM) as the cost, schedule, and performance data used to determine a project's status. The EVM for each agency's projects must be developed in accordance with the ANSI EIA-748 B standard, defined above.

Paragraph (a)(8) defines the term "grossly deviated" as a variance of 40 percent or more from the original cost and schedule expectations. This means that if any major IT investment project's EVM cost, schedule, or performance indicators deviate 40 percent or more from its original baseline, the project will be considered to have grossly deviated, thereby triggering the remedial actions set forth in section (e)(3).

Paragraph (a)(9) defines the term "independent government cost estimate" to mean an examination conducted by a third party not involved in the project and who provides a neutral and nonbiased analysis of the IT investment. The independent government cost estimate is intended to ensure that the agency and the contractor take proper steps to plan, acquire, and implement the investment

appropriately.

Paragraph (a)(10) defines an "IT investment project" as an investment that requires special management attention, requires significant agency resources, is responsible for obligating over \$500,000 annually, or has significant program or policy implications. This definition is consistent with OMB's definition of a major IT investment. However, it is the intent of the Committee that OMB shall develop a consistent and uniform government-wide definition of information technology that applies to investments that significantly incorporate information technology hardware and software such as satellites and weapons systems.

Paragraph (a)(11) defines the term "life cycle cost" to mean the total cost of an IT investment, which encompasses planning, research and development, modernization, enhancement, operation,

and maintenance.

Paragraph (a)(12) defines the "original baseline" as the agreed upon cost, schedule, and performance parameters of an IT investment. The original baseline, also known as a performance measurement baseline or PMB should be developed at the beginning of the project, using EVM standards and approved by OMB. This original baseline shall be used through the course of the project, unless there is a gross deviation. Following a gross deviation, a new EVM baseline (also known as a rebaseline) must be established, as required for remedial action in section (e)(3). This new EVM baseline will, once established after a gross deviation, be considered an original baseline.

Paragraph (a)(13) defines "significantly deviated" as an EVM variance that is at least 20 percent from the original baseline. This means that if any major IT investment project's EVM cost, schedule, or performance indicators deviate 20 percent or more from its original baseline, the project will be considered to have significantly deviated, thereby triggering the remedial actions set forth in section (d)(2).

#### Subsection (b). Core IT Investment Projects Designation

Subsection (b) requires the CIO, with approval from the agency head, to designate those IT investment projects that are most critical to the agency's mission as "core IT investment projects." The designation may be based on whether the IT investment represents a higher dollar value relative to the rest of the portfolio, is critical to the successful mission of the agency, incorporates unproven or undeveloped technology, or whether the project would have a significant negative impact on the successful completion of the agency mission if the project experienced significant cost, schedule, or performance deviations.

#### Subsection (c). Cost, Schedule, and Performance Reports

Subsection (c) designates the reporting requirements for agencies on all IT investments. The bill requires that the project manager for the investment must submit, within 14 calendar days after each fiscal quarter, a descriptive report to the CIO. This report should include the current cost, schedule, and performance for all projects under the project manager's supervision; a description of the original cost, schedule, and performance benchmarks for the investment; any variance in the cost, schedule, or performance of the investment since the commencement of the project; and a declaration of any known, expected, or anticipated changes to the original or current baseline description. However, if a project manager determines that an IT investment has deviated according to definitions established in paragraph (a)(8) and paragraph (a)(13) before the end of the fiscal quarter, then the project manager must within 14 days of the determination submit a descriptive report including the same information to the CIO.

#### Subsection (d). Determination of Significant Deviation

Subsection (d) requires CIOs to report to Congress any major IT investments which have "significantly deviated," as defined in paragraph (a)(13). A CIO makes this determination based on a report from the project manager as described in subsection (c). Upon the significant deviation determination, the CIO must notify the agency head and issue a report to Congress and GAO, which includes the date the CIO determined the project deviated; the amount of the cost increase and schedule delay for delivery; any change in requirements from the original contract; the reason for the differences between the project manager's, contractor's, and any independent analysis estimated cost for the investment; the reasons why the investment has deviated from cost, schedule or performance benchmarks; and a summary of the plan of action to correct the deviation. The agency head must submit this report to Congress and GAO within 21 calendar days after the determination of a significant deviation.

#### Subsection (e). Determination of Gross Deviation

Subsection (e) requires CIOs to submit a report described in subsection (c) to Congress upon the project manager's determination that the IT investment has grossly deviated, as defined in paragraph (a)(8). If the project has not been previously reported as grossly deviated then the agency head must submit a report to Congress that includes the date the CIO determined the investment had grossly deviated; whether the project was previously reported as significantly deviated under subsection (d) or grossly deviated under this subsection; incorporation of all previous reports to Congress on the investment by reference; updated information as required under subsection (d); and a comprehensive plan of action to remedy the gross deviation with milestones to control future cost, schedule, and performance deviations in the future. In addition, the agency head must submit to Congress a report that describes the primary business case and key functional requirements of the investment; any portions of the investment that may be feasibly procured under a fixed-price contract; a certification by the agency head that all technical requirements have been reviewed and are aligned with the primary business case; a description of any changes to the primary business case or functional requirements since the project's inception; and an independent cost estimate by an entity approved by OMB. The agency must also submit to Congress an analysis of the business goals that the project was originally designed to address; an analysis of what project deliverables remain to be completed to achieve the business goals defined; the three most cost-effective alternative approaches to achieve the business goals defined; a cost-benefit analysis that compares the three most cost-effective alternative approaches with the current investment; and a cost-benefit analysis of termination of the project without choosing any of the three alternative ap-proaches; a new cost, schedule, and performance baseline that is consistent with the independent government cost estimate; and a designation by the agency that the project is considered a core IT investment under subsection (b).

The agency head must report the information required under this subsection to Congress within 45 calendar days after the end of the fiscal quarter or interim determination and ensure the completion of the remedial actions as reported by the agency within 180 calendar days. If the agency head fails to complete the remedial action within 180 calendar days, then additional funds may not be spent on the investment.

The bill allows an exception to the reporting and analyses requirements, which states that the CIO, in coordination with the agency head and OMB Director, may forgo completion of any element of a report or analysis if it is determined that those elements are not relevant to the understanding of the difficulties facing the project or further continuation of the project in a timely and cost-efficient manner. If the CIO chooses to forgo such reporting or analysis, the CIO must explain to Congress the basis for the CIO's decision to exclude any element of the report or analysis not provided. The purpose of allowing for such an exception is so that if an element of the reporting or analyses required under this section does not pertain to the IT investment project that has deviated and/or whose inclusion would not be beneficial in bringing the

project back on track, the agency does not have to conduct work to provide irrelevant information to Congress. The requirement that the CIO must provide the basis for not including any omitted element is intended to ensure that the CIO can sufficiently explain why the information would not be pertinent.

Subsection (f). Additional Requirements for Core IT Investment Project Reports

Subsection (f) outlines additional planning requirements for those IT projects designated as core IT investments by the agency head. First, this section requires that an IT project identified as grossly deviated under subsection (e) must be designated as a core IT project, as defined under subsection (b) in the next budget submission. In addition, those IT investments that are listed as core IT investments must be tracked by the agency head on a quarterly basis. The bill would require the agency head to notify Congress within 14 days following the end of the fiscal quarter if there are any changes to the primary business case or key functional requirements and explain the changes and impact the changes will have on the cost and ultimate effectiveness of the project. Further, if the CIO determines the core IT investment would have deviated as defined under subsection (a) without a change in the primary business case or key functional requirements, then the agency head must fulfill and submit the requirements under subsection (d) or subsection (e) depending on the deviation.

Subsection 4(b). Inclusion in the Budget Submitted to Congress

Subsection 4(b) requires agencies to include the reports designated under subsection (f) of Section 11317 of Title 40, as amended by this bill, in their annual budget submissions to Congress.

Subsection 4(c). Improvement of Information Technology Acquisition and Development

Section 4(c) amends Section 11319 of Title 40, United States Code. The section-by-section analysis below refers to the new Section 11319, as amended by this bill.

Subsection (a). Purpose

Subsection (a) explains the purposes of the section. The purposes are that agencies will meaningfully examine current internal processes used to plan, manage, and deliver IT investments and consistently improve delivery of superior IT products and services on time and within budget.

Subsection (b). OMB Guidance

Subsection (b) requires OMB to develop and oversee the implementation of guidance established under this section within 180 calendar days of enactment of this bill. It is the intent of the Committee that OMB will, to the extent possible, ensure agency programs are consistent government wide, but will allow agencies enough flexibility to tailor programs to ensure success.

#### Subsection (c). Establishment of Program

Subsection (c) requires each CIO, upon approval of the agency head, to establish a program to improve IT processes within 120 calendar days of enactment.

#### Subsection (d). Program Requirements

Subsection (d) specifies the requirements of the program mandated by subsection (c). The Committee expects that if agencies have not already done so, they will establish and continually update a documented process for IT acquisition planning, requirements development and management, project management and oversight, earned-value management, and risk management. Further, this subsection requires agencies to develop metrics that can be monitored in near real-time through an easy to understand "dashboard," consistent with the goals of Section 3 of this bill, appropriate for project management and that appropriately monitor the process and development status of IT investments, and achievement of stated program and investment outcomes. In addition, the subsection recognizes that there is a government-wide workforce shortage of key personnel required to manage highly complex IT investments. Therefore, the subsection requires agencies to develop a process to ensure that key program personnel have the appropriate level of experience, training, and education from an institute recognized by the Director of OMB. Lastly, the subsection requires that agencies develop an appropriate and effective process for CIOs to intervene and stop funding of an IT investment if the project is at risk of not achieving its major milestones. It is the expectation of the Committee that agencies will give CIOs clear and direct authority to intervene or stop funding at any point in the process of planning, managing, and delivering an IT investment.

#### Subsection (e). Annual Report to OMB

Subsection (e) requires agency heads to submit an annual report to OMB. The report must include, among other elements, a detailed summary of the program's accomplishments, the status of implementation, and the metrics used to determine the program's success.

#### Subsection (f). Annual Report to Congress

Subsection (f) establishes reporting requirements for OMB and Congress to ensure agencies are appropriately and efficiently implementing subsection (d).

#### Section 5. Major Automated Information System Programs

#### Subsection 5(a). Definitions

Subparagraph 5(a)(1) amends the section heading of Section 2445a of title 10 of the U.S. Code to read "Section 2445a. Definitions"

Subparagraph 5(a)(2) and Subparagraph 5(a)(3) make technical corrections to Title 10 of the U.S. Code that harmonize, to the extent possible, the definitions and requirements established by S. 920 for civilian agencies with those requirements under Title 10 of the U.S. Code for the Department of Defense. These subparagraphs also ensure that the CIO continues to be the Department lead for

overseeing IT investments, avoiding duplicative efforts, preventing capability gaps, and ensuring that older and newer systems are

compatible and interoperable.

For example, Subparagraphs 5(a)(3) requires the Department of Defense to track IT investments with an appropriate EVM project management system that shows accurate and reliable cost, schedule, and performance information. If DOD finds that investments deviate by 15 to 25 percent from the established baseline based on the EVM system, then DOD will be required to include information on troubled projects similar to civilian agencies as required under section 4.

Subsection 5(b). Cost, Schedule, and Performance Information

Subsection 5(b) mirrors subsection 4 and enhances current Title 10 significant and critical change planning and reporting requirements for the Department of Defense to make them consistent with requirements S. 920 establishes for civilian agencies.

#### Section 6. IT SWAT

Subsection 6(a) establishes the purpose of the IT SWAT (Significant Waste Avoidance Team) as providing a resource to assist agencies in avoiding deviations as defined in subsection 4(a) of the bill.

Subsection 6(b) directs the E-Government Administrator to establish the IT SWAT within 180 calendar days after the enactment of the act to carry out subsection 4(a). The individuals on the IT SWAT shall be highly trained and experienced program managers who are trained to the Senior/Expert level according to the Federal Acquisition Certification for Program and Project Managers, or who have comparable education, certification, training, and experience to successfully manage high-risk IT investment projects. The OMB Director will determine the number of individuals who serve on each IT SWAT.

Subsection 6(c) requires OMB to identify consultants outside of government who have expert knowledge in IT program and risk management. If OMB decides that a team of IT experts is needed, OMB can hire on a limited-time basis consultants from the private sector. However, the number of consultants that are hired from the private sector cannot equal more than 20 percent of any IT SWAT. The remaining 80 percent of the IT SWAT members must be federal government employees. Further, consultants that have an established relationship with an organization that is under review may not participate in the assessment. This subsection gives the E-Government Administrator the ability to enter into competitively bid contracts with one or more qualified consultants.

Subsection 6(d) requires the E-Government Administrator to determine whether an IT investment may deviate as defined in Section 4 of the bill. If a project is reasonably suspected to deviate in the future or lacks information that will allow the E-Government Administrator to accurately assess the investment, then the section directs OMB to recommend the assignment of one or more members from the IT SWAT to assess the project. The costs for the assessment would be paid for by the IT investment project being as-

sessed. The E-Government Administrator shall monitor the progress being made by the IT SWAT.

Subsection 6(e) requires the E-Government Administrator to recommend that the agency head take steps to reduce and avoid any deviations in cost, schedule, and performance if potential problems are found during the assessment under subsection 6(d). The E-Government Administrator can recommend that the agency provide training or mentoring to improve the qualifications of the program manager; replace the program manager or other staff; supplement the program manager with highly qualified federal government employees or independent contractors; terminate the IT investment; or hire an independent contractor to report directly to senior management and the E-Government Administrator.

Subsection 6(f) allows the OMB E-Government Administrator to reprogram amounts within an agency to pay for an assessment under subsection 6(d) and to notify the Congressional committees

on appropriations of any such reprogramming.

Subsection 6(g) requires the Director of OMB to include in the annual E-Government report a detailed summary of the composition and activities of the IT SWAT, including the number and qualifications of individuals on the IT SWAT; a description of the IT investment projects that the IT SWAT assessed and worked on during the previous fiscal year; the major issues that necessitated the involvement of the IT SWAT and whether the issues were resolved; whether or not issues were resolved and any plans the agency head has to resolve these issues; a breakdown of the sources and amounts OMB and federal agencies spent to support the activities of the IT SWAT; and a determination of whether the IT SWAT was effective in reducing the number of IT investment projects that deviate as defined in Section 4.

Section 7. Awards for Personnel for Excellence in the Acquisition of Information System and Information Technology

Subsection 7(a) requires the Director of the Office of Personnel Management to develop policy and guidance for agencies to recognize excellent performance by federal government employees or teams of federal government employees in acquisition of IT systems.

Subsection 7(b) requires that any award program developed under subsection 7(a) should use, to the extent practical, objective outcome performance measures and include procedures for individuals to be nominated and evaluated.

Subsection 7(c) allows the Director of the Office of Personnel Management and Director of Office of Management and Budget to develop guidance policy to provide rewards for federal government employees who receive recognition under subsection 7(b).

#### V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirement of paragraph 11(b)(1) of rule XXVI of the Standing Rules of the Senate the Committee has considered the regulatory impact of this bill. CBO states that there are no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and no costs on State, local, or tribal governments. The legislation contains no other regulatory impact.

#### VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 26, 2009.

Hon. Joseph I. Lieberman, Chairman,

Committee on Homeland Security and Governmental Affairs, U.S.  $Senate,\ Washington,\ DC.$ 

Dear Mr. Chairman: The Congressional Budget Office has prepared the enclosed cost estimate for S. 920, the Information Technology (IT) Investment Oversight Enhancement and Waste Prevention Act of 2009.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Matthew Pickford.

Sincerely,

Douglas W. Elmendorf.

Enclosure.

- S. 920—Information Technology (IT) Investment Oversight Enhancement and Waste Prevention Act of 2009
- S. 920 would amend federal law regarding the oversight of project plans for information technology (IT) systems. The legislation would require chief information officers to identify critical IT projects and would subject each IT project to additional reporting, planning, and monitoring requirements, including corrective actions for projects that fail to meet applicable standards. In addition, the legislation would establish a group of information technology experts, administered by the Office of Management and Budget (OMB), to respond to problems with IT projects. Finally, S. 920 would authorize agencies to provide awards (including cash) to federal employees for excellence in IT acquisition, subject to the availability of appropriated funds.

CBO estimates that implementing S. 920 would cost about \$30 million per year, or \$150 million over the 2010-2014 period, primarily for the additional reporting requirements, subject to the availability of appropriated funds. The bill would have no effect on

direct spending or revenues.

Most of the provisions of S. 920 would expand the current practices of the federal government. Under the Clinger-Cohen Act of 1996, agencies are required to analyze, track, and evaluate the risks and results of major capital investments in IT systems. To accomplish this, OMB uses a Management Watch List to monitor and plan agencies' IT investments. OMB also evaluates each agency's

capability to manage its investments.

Based on information from OMB and various agencies, CBO expects that complying with the reporting provisions of S. 920 would increase the administrative expenses of most federal agencies, but because of the large number of agencies and computer systems involved, we cannot precisely estimate the likely total costs. According to the Government Accountability Office (GAO), about \$71 billion will be spent on IT projects by the federal government in 2009. In addition, GAO has reported that OMB and federal agencies have identified more than 400 IT projects—costing \$25.2 billion in 2008—as being poorly planned, poorly performing, or both. CBO expects that the legislation would require additional quarterly status reports and detailed corrective action plans for a significant number of those troubled IT projects. We estimate that implementing the bill would increase the cost of such projects by a total of \$25

million a year over the 2010-2014 period.

Reporting costs over the 2010–2014 period would generally come from agencies' salary and expense budgets. In addition, there could be additional costs to implement and deploy the IT response group and to provide for awards to IT employees. Those costs also would be subject to the availability of appropriated funds, and we estimate that they would total around \$5 million a year, depending on the number of employees deployed or awarded.

S. 920 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not

affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Matthew Pickford. The estimate was approved by Peter H. Fontaine, Assistant Director for Budget Analysis.

#### VII. CHANGES IN EXISTING LAWS, AS REPORTED

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the following changes in existing law made by the bill, as reported, are shown as follows: (existing law proposed to be omitted is enclosed in [black brackets], new matter is printed in italic, existing law in which no change is proposed is shown in roman):

#### UNITED STATES CODE

#### TITLE 10—ARMED

#### Subtitle A—General Military Law

PART IV—SERVICE SUPPLY, AND PROCUREMENT

# CHAPTER 144A—MAJOR AUTOMATED INFORMATION SYSTEM PROGRAMS

\* \* \* \* \* \* \*

#### § 2445a. Definitions

(a) Major Automated Information System Program.—In this chapter [10 USCS §§ 2445a et seq.], the term "major automated information system program" means a Department of Defense program for the acquisition of an automated information system (either as a product or a service) if—

(1) the program is designated by the Secretary of Defense, or a designee of the Secretary, as a major automated information

system program; [or]

(2) the dollar value of the program is estimated to exceed—

(A) \$32,000,000 in fiscal year 2000 constant dollars for all program costs in a single fiscal year;

(B) \$126,000,000 in fiscal year 2000 constant dollars for

all program acquisition costs for the entire program; or (Ĉ) \$378,000,000 in fiscal year 2000 constant dollars for the total life-cycle costs of the program (including operation and maintenance costs)[.]; or

(3) the Chief Information Officer, with the approval of the

Secretary of Defense, determines that the program-

(A) delivers a capability critical to the successful completion of the mission of the Department of Defense, or a portion of such mission;

(B) incorporates unproven or previously undeveloped technology to meet primary program technical require-

ments: or

(C) would have a significant negative impact on the successful completion of the mission of the Department of Defense if the program experienced significant cost, schedule,

- or performance deviations.
  (b) ADJUSTMENT.—The Secretary of Defense may adjust the amounts (and base fiscal year) set forth in subsection (a) on the basis of Department of Defense escalation rates. An adjustment under this subsection shall be effective after the Secretary transmits a written notification of the adjustment to the congressional defense committees.
- (c) Increments.—In the event any increment of a major automated information system program separately meets the requirements for treatment as a major automated information system program, the provisions of this chapter [10 USCS §§ 2445a et seq.] shall apply to such increment as well as to the overall major automated information system program of which such increment is a

(d) Other Major Information Technology Investment Pro-GRAM.—In this chapter, the term "other major information technology investment program" means the following:

(1) An investment that is designated by the Secretary of De-

fense, or a designee of the Secretary, as a "pre-Major Automated Information System" or "pre-MAIS" program.

(2) Any other investment in automated information system products or services that is expected to exceed the thresholds established in subsection (a), as adjusted under subsection (b), but is not considered to be a major automated information system program because a formal acquisition decision has not yet been made with respect to such investment.

(e) Definitions.—In this chapter:

(1) CHIEF INFORMATION OFFICER.—The term "Chief Information Officer" means the Chief Information Officer of the Department of Defense, designated under section 3506(a)(2) of title 44.

- (2) EARNED VALUE MANAGEMENT.—The term "Earned Value Management" means the cost, performance, and schedule data used to determine the status of a major automated information system program that has been developed in accordance with the ANSI EIA-748-B Standard.
- (3) Independent government cost assessment.—The term "independent government cost assessment" means a pragmatic

and neutral analysis, assessment, and quantification of all costs and risks associated with a major automated information system program developed and submitted by the Director of Independent Cost Assessment.

#### § 2445b. Cost, schedule, and performance information

(a) SUBMITTAL OF COST, SCHEDULE, AND PERFORMANCE INFORMATION.—The Secretary of Defense shall submit to [Congress] the Office of Management and Budget, the Government Accountability Office, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Committee on Oversight and Government Reform of the House of Representatives each calendar year, not later than 45 days after the President submits to Congress the budget for a fiscal year under section 1105 of title 31 [31 USCS § 1105], budget justification documents regarding cost, schedule, and performance for each major automated information system program and each other major information technology investment program for which funds are requested by the President in the budget.

(b) ELEMENTS REGARDING MAJOR AUTOMATED INFORMATION SYSTEM PROGRAMS.—The documents submitted under subsection (a) with respect to a major automated information system program shall include detailed and summarized information with respect to the automated information system to be acquired under the pro-

gram, and shall specifically include each of the following:

(1) The development schedule, including major milestones.

(2) The implementation schedule, including estimates of milestone dates, initial operational capability, and full operational capability.

(3) Estimates of development costs and full life-cycle costs.

(4) A summary of key performance parameters.

- (5) A description of the primary business case and key functional requirements for the program, including an analysis of alternatives.
- (6) An identification and description of any portions of the program that have technical requirements of sufficient clarity that such portions may be feasibly procured under firm, fixed-price contracts.

(7) An independent government cost assessment for the project

provided by the Director of Independent Cost Assessment.

(8) Certification by the Chief Information Officer that all technical and business requirements have been reviewed and validated to ensure alignment with the reported business case.

(9) Any changes to the primary business case or key functional requirements which have occurred since the inception of the program.

(c) Baseline.—

- (1) For purposes of this chapter [10 USCS §§ 2445a et seq.], the initial submittal [to Congress] of the documents required by subsection (a) with respect to a major automated information system program shall constitute the original estimate or information originally submitted on such program for purposes of the reports and determinations on program changes in section 2445c of this title.
- (2) An adjustment or revision of the original estimate or information originally submitted on a program may be treated as

the original estimate or information originally submitted on the program if the adjustment or revision is the result of a critical change in the program covered by section 2445c(d) of this title [10 USCS § 2445c(d)].

(3) In the event of an adjustment or revision to the original estimate or information originally submitted on a program under paragraph (2), the Secretary of Defense shall include in the next budget justification documents submitted under subsection (a) after such adjustment or revision a notification to the Office of Management and Budget, the Government Accountability Office, the Committee on Armed Services of the Senate, the Committee on Armed Services of the House of Representatives, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Committee on Oversight and Government Reform of the House of Representatives [the congressional defense committees] of such adjustment or revision, together with the reasons for such adjustment or revision.

(d) Elements Regarding Other Major Information Tech-NOLOGY INVESTMENT PROGRAMS.—With respect to each other major information technology investment program, the information required by subsection (a) may be provided in the format that is most

appropriate to the current status of the program.

#### §2445c. Reports: quarterly reports; reports on program changes

(a) QUARTERLY REPORTS BY PROGRAM MANAGERS.—The program manager of a major automated information system program or other major information technology investment program shall, on a quarterly basis, submit to the senior Department of Defense official responsible for the program a written report [identifying] that-

(1) identifies any variance in the projected development schedule, implementation schedule, life-cycle costs, or key performance parameters for the major automated information system or information technology investment to be acquired under the program from such information as originally submitted [to Congress under section 2445b of this title [10 USCS]

§ 2445b]:[.]

(2) describes the cost, schedule, and performance of all pro-

grams under the program manager's supervision;

(3) provides the original and current program cost, schedule, and performance benchmarks for each program under the program manager's supervision;

(4) for each program under the program manager's supervision, any known, expected, or anticipated changes to program schedule milestones or program performance benchmarks in-cluded as part of the original or current baseline description.

(b) SENIOR OFFICIALS RESPONSIBLE FOR PROGRAMS.—For purposes of this section, the senior Department of Defense official responsible for a major automated information system program or other major information technology investment program is-

(1) in the case of an automated information system or information technology investment to be acquired for a military department, the senior acquisition executive for the military department; or

(2) in the case of any other automated information system or information technology investment to be acquired for the Department of Defense or any component of the Department of Defense, the Under Secretary of Defense for Acquisition, Technology, and Logistics.

(c) REPORT ON SIGNIFICANT CHANGES IN PROGRAM.—

(1) IN GENERAL.—If, based on a quarterly report submitted by the program manager of a major automated information system program pursuant to subsection (a), the senior Department of Defense official responsible for the program makes a determination described in paragraph (2), the official shall, not later than 45 days after receiving such report, notify [the congressional defense committees] the Office of Management and Budget, the Government Accountability Office, the Committee on Armed Services of the Senate, the Committee on Armed Services of the House of Representatives, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Committee on Oversight and Government Reform of the House of Representatives in writing of such determination.

(2) COVERED DETERMINATION.—A determination described in this paragraph with respect to a major automated information

system program is a determination that—

(A) there has been a schedule change that will cause a delay of more than six months but less than a year in any program schedule milestone or significant event from the schedule originally submitted [to Congress] under paragraph (1) or (2) of section 2445b(b) of this title [10 USCS  $\S 2445b(b)$ ];

(B) the estimated program development cost or full lifecycle cost for the program has increased by at least 15 percent, but less than 25 percent, over the original estimate submitted [to Congress] under paragraph (3) of section 2445b(b) of this *title* [10 USCS § 2445b(b)]; [or]

(C) there has been a significant, adverse change in the expected performance of the major automated information system to be acquired under the program from the parameters originally submitted [to Congress] under paragraph (4) of section 2445b(b) of this *title* [10 USCS § 2445b(b)]; or [.]

(D) the Earned Value Management of the program has changed by at least 15 percent, but less than 25 percent.

(3) Notification requirements.—The notification required under paragraph (1) shall include-

(A) the date on which the determination described in paragraph (2) was made:

(B) the amount of the cost increases and the extent of the schedule delays with respect to such program;

(C) any requirements that—

(i) were added subsequent to the original contract; or (ii) were part of the original contract, but were changed by deferment or deletion from the original schedule, or were otherwise no longer included in the contract;

(D) an explanation of the differences between—

- (i) the estimate at completion between the program manager, any contract, and any independent analysis and
  - (ii) the original budget at completion;

(E) a statement of the reasons underlying the program's significant changes; and

(F) a summary of the plan of action to remedy the signifi-

cant changes.

(4) ALTERNATIVE SIGNIFICANT CHANGES DETERMINATION.—If the program manager determines, subsequent to a change in the primary business case or key functional requirements, that without such change the program would undergo significant changes—

(A) the program manager shall notify the Secretary of

Defense of the significant changes; and

(B) the Secretary of Defense shall notify the congressional defense committees in accordance with the requirements of this subsection.

(d) REPORT ON CRITICAL CHANGES IN PROGRAM.—

(1) IN GENERAL.—If, based on a quarterly report submitted by the program manager of a major automated information system program or other major information technology investment program pursuant to subsection (a), the senior Department of Defense official responsible for the program makes a determination described in paragraph (2), the official shall, not later than 60 days after receiving such report—

(A) carry out an evaluation of the program under sub-

section (e); and

(B) submit, through the Secretary of Defense, to [the congressional defense committees] the Office of Management and Budget, the Government Accountability Office, the Committee on Armed Services of the Senate, the Committee on Armed Services of the House of Representatives, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Committee on Oversight and Government Reform of the House of Representatives a report meeting the requirements of subsection (f).

(2) COVERED DETERMINATION.—A determination described in this paragraph with respect to a major automated information system program or other major information technology invest-

ment program is a determination that—

(A) the automated information system or information technology investment failed to achieve initial operational capability within five years after funds were first obligated

for the program;

(B) there has been a schedule change that will cause a delay of one year or more in any program schedule milestone or significant event from the schedule originally submitted [to Congress] under paragraph (1) or (2) of section 2445b(b) of this title [10 USCS §2445b(b)] or section 2445b(d) of this title [10 USCS §2445b(d)], as applicable;

(C) the estimated program development cost or full life-cycle cost for the program has increased by 25 percent or more over the original estimate submitted [to Congress] under paragraph (3) of section 2445b(b) of this *title* [10]

USCS  $\S 2445b(b)$ ] or section 2445b(d) of this title [10]

USCS §2445b(d)], as applicable [; or]

(D) there has been a change in the expected performance of the major automated information system or major information technology investment to be acquired under the program that will undermine the ability of the system to perform the functions anticipated at the time information on the program was originally submitted [to Congress] under section 2445b(b) of this title [10 USCS § 2445b(b)] or section 2445b(d) of this title [10 USCS § 2445b(d)], as applicable; or [.]

(E) the Earned Value Management of the program has

changed by at least 25 percent.

(3) ALTERNATIVE CRITICAL CHANGES DETERMINATION.—If the program manager determines, subsequent to a change in the primary business case or key functional requirements, that without such change the program would undergo critical changes—

(A) the program manager shall notify the Secretary of

Defense of the critical changes; and

(B) the Secretary of Defense shall fulfill the requirements described in subparagraphs (A) and (B) of paragraph (1).

- (e) PROGRAM EVALUATION.—The evaluation of a major automated information system program or other major information technology investment program conducted under this subsection for purposes of subsection (d)(1)(A) shall include an assessment of—
  - (1) the projected schedule and an independent government cost assessment provided by the Director of Independent Cost Assessment [cost and schedule] for completing the program if current requirements are not modified;
  - (2) the projected schedule and an independent government cost assessment provided by the Director of Independent Cost Assessment [cost and schedule ] for completing the program based on reasonable modification of such requirements; and

(3) the rough order of magnitude of the cost and schedule for

any reasonable alternative system or capability.

(f) REPORT ON CRITICAL PROGRAM CHANGES.—A report on a major automated information system program or other major information technology investment program conducted under this subsection for purposes of subsection (d)(1)(B) shall *include*—[include a written certification]

(1) a written certification (with supporting explanation) stating that

ing that—

(A) [(1)] the automated information system or information technology investment to be acquired under the program is essential to the national security or to the efficient management of the Department of Defense;

(B) [(2)] there is no alternative to the system or information technology investment which will provide equal or

greater capability at less cost;

(C) [(3)] the new estimates of the costs, schedule, and performance parameters with respect to the program and system or information technology investment, as applicable, have been determined, with the concurrence of the Di-

rector of Cost Assessment and Program Evaluation, to be reasonable; and

(D) [(4)] the management structure for the program is adequate to manage and control program costs; and [.]

(E) all technical and business requirements have been reviewed and validated to ensure alignment with the reported business case; and

(2) a description of—

(A) the primary business case and key functional requirements for the program, including an analysis of alternatives:

(B) any portions of the program that have technical requirements of sufficient clarity that such portions may be feasibly procured under firm, fixed-price type contract; and

(C) any changes to the primary business case or key functional requirements which have occurred since the inception of the program.

(g) Prohibition on Obligation of Funds.—

(1) If the determination of a critical change to a program is made by the senior Department official responsible for the program under subsection (d)(2) and a report is not submitted to Congress within the 60-day period provided by subsection (d)(1), appropriated funds may not be obligated for any major contract under the program.

(2) The prohibition on the obligation of funds for a program under paragraph (1) shall cease to apply on the date on which Congress has received a report in compliance with the require-

ments of subsection (d)(2).

#### TITLE 31—MONEY AND FINANCE

\* \* \* \* \*

### **Subtitle II—The Budget Process**

\* \* \* \* \* \* \*

# CHAPTER 11—THE BUDGET AND FISCAL, BUDGET, AND PROGRAM INFORMATION

#### § 1105. Budget contents and submission to Congress

(a) On or after the first Monday in January but not later than the first Monday in February of each year, the President shall submit a budget of the United States Government for the following fiscal year. Each budget shall include a budget message and summary and supporting information. The President shall [include in each budget—

(1) information on activities and functions of the Government [.];

(2) when practicable, information on costs and achievements of Government programs [.];

(3) other desirable classifications of information[.];

(4) a reconciliation of the summary information on expendi-

tures with proposed appropriations[.];

(5) except as provided in subsection (b) of this section, estimated expenditures and proposed appropriations the President decides are necessary to support the Government in the fiscal year for which the budget is submitted and the 4 fiscal years after that year[.];

(6) estimated receipts of the Government in the fiscal year for which the budget is submitted and the 4 fiscal years after

that year under—

(A) laws in effect when the budget is submitted; and

(B) proposals in the budget to increase revenues[.];

(7) appropriations, expenditures, and receipts of the Govern-

ment in the prior fiscal year[.];

(8) estimated expenditures and receipts, and appropriations and proposed appropriations, of the Government for the current fiscal year[.];

(9) balanced statements of the-

(A) condition of the Treasury at the end of the prior fiscal year;

(B) estimated condition of the Treasury at the end of the

current fiscal year; and

(C) estimated condition of the Treasury at the end of the fiscal year for which the budget is submitted if financial proposals in the budget are adopted[.];

(10) essential information about the debt of the

Government[.];

- (11) other financial information the President decides is desirable to explain in practicable detail the financial condition of the Government [.];
- (12) for each proposal in the budget for legislation that would establish or expand a Government activity or function, a table showing—

(A) the amount proposed in the budget for appropriation and for expenditure because of the proposal in the fiscal

year for which the budget is submitted; and

(B) the estimated appropriation required because of the proposal for each of the 4 fiscal years after that year that the proposal will be in effect[.];

(13) an allowance for additional estimated expenditures and proposed appropriations for the fiscal year for which the budg-

et is submitted[.];

- (14) an allowance for unanticipated uncontrollable expendi-
- tures for that year[.];
  (15) a separate statement on each of the items referred to in section 301(a)(1)(5) of the Congressional Budget Act of 1974 (2)
- U.S.C. 632(a)(1)(5))[.];
  (16) the level of tax expenditures under existing law in the tax expenditures budget (as defined in section 3(a)(3) of the Congressional Budget Act of 1974 (2 U.S.C. 622(a)(3)) for the fiscal year for which the budget is submitted, considering projected economic factors and changes in the existing levels based on proposals in the budget[.]:

(17) information on estimates of appropriations for the fiscal year following the fiscal year for which the budget is submitted for grants, contracts, and other payments under each program for which there is an authorization of appropriations for that following fiscal year when the appropriations are authorized to be included in an appropriation law for the fiscal year before the fiscal year in which the appropriation is to be available for obligation [.];

(18) a comparison of the total amount of budget outlays for the prior fiscal year, estimated in the budget submitted for that year, for each major program having relatively uncontrollable outlays with the total amount of outlays for that program

in that year[.];

(19) a comparison of the total amount of receipts for the prior fiscal year, estimated in the budget submitted for that year, with receipts received in that year, and for each major source of receipts, a comparison of the amount of receipts estimated in that budget with the amount of receipts from that source in that year[.];

(20) an analysis and explanation of the differences between each amount compared under clauses (18) and (19) of this

subsection[.];

(21) a horizontal budget showing—

(A) the programs for meteorology and of the National Climate Program established under section 5 of the National Climate Program Act (15 U.S.C. 2904);

(B) specific aspects of the program of, and appropriations

for, each agency; and

(C) estimated goals and financial requirements[.];

(22) a statement of budget authority, proposed budget authority, budget outlays, and proposed budget outlays, and descriptive information in terms of—

(A) a detailed structure of national needs that refers to the missions and programs of agencies (as defined in sec-

tion 101 of this title); and

(B) the missions and basic programs [.];

(23) separate appropriation accounts for appropriations under the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.) and the Federal Mine Safety and Health Act of 1977 (30 U.S.C. 801 et seq.)[.];

(24) recommendations on the return of Government capital to the Treasury by a mixed-ownership corporation (as defined in section 9101(2) of this title) that the President decides are

desirable[.]:

(25) a separate appropriation account for appropriations for each Office of Inspector General of an establishment defined under section 11(2) of the Inspector General Act of 1978[.];

(26) a separate statement of the amount of appropriations requested for the Office of National Drug Control Policy and each program of the National Drug Control Program [.];

(27) a separate statement of the amount of appropriations requested for the Office of Federal Financial Management [.];

(28) beginning with fiscal year 1999, a Federal Government performance plan for the overall budget as provided for under section 1115[.];

(29) information about the Violent Crime Reduction Trust Fund, including a separate statement of amounts in that Trust Fund \( \begin{aligned} \begin{aligned} \limbde{1} \end{aligned} \end{aligned} \).

(30) an analysis displaying, by agency, proposed reductions in full-time equivalent positions compared to the current year's level in order to comply with section 5 of the Federal Workforce Restructuring Act of 1994[.];

(31) a separate statement of the amount of appropriations requested for the Chief Financial Officer in the Executive Office

of the President[.];

(32) a statement of the levels of budget authority and outlays for each program assumed to be extended in the baseline as provided in section 257(b)(2)(A) and for excise taxes assumed to be extended under section 257(b)(2)(C) of the Balanced Budget and Emergency Deficit Control Act of 1985[.];

(33) a separate appropriation account for appropriations for the Inspectors General Criminal Investigator Academy and the Inspectors General Forensic Laboratory of the Department of

the Treasury[.];

(34) with respect to the amount of appropriations requested for use by the Export-Import Bank of the United States, a separate statement of the amount requested for its program budget, the amount requested for its administrative expenses, and of the amount requested for its administrative expenses, the amount requested for technology expenses [.];

[(33)] (35) (a) \* \*

(h)(1) If there is a medicare funding warning under section 801(a)(2) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 made in a year, the President shall submit to Congress, within the 15-day period beginning on the date of the budget submission to Congress under subsection (a) for the succeeding year, proposed legislation to respond to such warning.

(2) Paragraph (1) does not apply if, during the year in which the warning is made, legislation is enacted which eliminates excess general revenue medicare funding (as defined in section 801(c) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003) for the 7-fiscal-year reporting period, as certified by the Board of Trustees of each medicare trust fund (as defined in section 801(c)(5) of such Act) not later than 30 days after the date of the enactment of such legislation[.]; and

(36) the reports prepared under section 11317(f) of title 40, United States Code, relating to the core IT investment projects

of the agency.

# TITLE 40—PUBLIC BUILDINGS, PROPERTY, AND WORKS

### Subtitle III—Information Technology Management

\* \* \* \* \* \* \* \*

#### CHAPTER 113—RESPONSIBILITY FOR ACQUISITIONS OF INFORMATION TECHNOLOGY

Subchapter II—Executive Agencies

#### §11317. [Significant deviations] Significant and gross deviations

"(a) DEFINITIONS.—In this subchapter:

"(1) AGENCY HEAD.—The term 'Agency Head' means the head of the Federal agency that is primarily responsible for the IT in-

vestment project under review.

\*

S(2) ANSI $\H$ EIA 748 B STANDARD.—The term 'ANSI—EIA–748– B Standard' means the measurement tool jointly developed by the American National Standards Institute and the Electronic Industries Alliance to analyze Earned Value Management sys-

"(3) Appropriate congressional committees.—The term

'appropriate congressional committees' means-

(A) the Committee on Homeland Security and Govern-

mental Affairs of the Senate;

"(B) the Committee on Oversight and Government Reform of the House of Representatives;

"(C) the Committee on Appropriations of the Senate;

"(D) the Committee on Appropriations of the House of Representatives; and

(E) any other relevant congressional committee with jurisdiction over an agency required to take action under this

- "(4) Chief Information officer.—The term 'Chief Information Officer' means the Chief Information Officer designated under section 3506(a)(2) of title 44 of the Federal agency that is primarily responsible for the IT investment project under review.
- "(5) Core it investment project.—The terms 'core IT investment project' and 'core project' mean a mission critical IT investment project designated as such by the Chief Information Officer, with approval by the Agency Head under subsection (b).

(6) DIRECTOR.—The term 'Director' means the Director of the

Office of Management and Budget.

(7) EARNED VALUE MANAGEMENT.—The term Earned Value Management' means the cost, performance, and schedule data used to determine project status and developed in accordance with the ANSI EIA-748-B standard.

"(8) GROSSLY DEVIATED.—The term 'grossly deviated' means cost, schedule, or performance variance that is at least 40 per-

cent from the Original Baseline.

"(9) Independent government cost estimate.—The term 'independent government cost estimate' means a pragmatic and neutral analysis, assessment, and quantification of all costs and risks associated with the acquisition of an IT investment project, which—

"(A) is based on programmatic and technical specifications provided by the office within the agency with primary responsibility for the development, procurement, and delivery of the project;

"(B) is formulated and provided by an entity other than the office within the agency with primary responsibility for the development, procurement, and delivery of the project;

"(C) contains sufficient detail to inform the selection of an Earned Value Management baseline benchmark measure under the ANSI EIA 748-B standard; and

"(D) accounts for the full life cycle cost plus associated operations and maintenance expenses over the usable life of

the project's deliverables.

"(10) IT INVESTMENT PROJECT.—The terms 'major IT investment project' and 'project' mean an information technology system or information technology acquisition, excluding systems or acquisitions of the Department of Defense, that—

(A) requires special management attention because of its importance to the mission or function of the agency, a com-

ponent of the agency, or another organization;

(B) is for financial management and obligates more than \$500,000 annually;

(C) has significant program or policy implications;

(D) has high executive visibility;

- (E) has high development, operating, or maintenance costs;
- (F) is funded through other than direct appropriations;

(G) is defined as major by the agency's capital planning and investment control process

"(11) LIFE CYCLE COST.—The term 'life cycle cost' means the total cost of an IT investment project for planning, research and development, modernization, enhancement, operation, and maintenance.

"(12) Original baseline.—

"(A) In GENERAL.—Except as provided under subparagraph (B), the term 'Original Baseline' means the ANSI EIA-748-B Standard-compliant Earned Value Management benchmark established at the commencement of an IT investment project.

"(B) Grossly deviated project.—If an IT investment project grossly deviates from its Original Baseline (as defined in subparagraph (A)), the term 'Original Baseline' means the ANSI EIA-748-B Standard-compliant Earned Value Management benchmark established under subsection (e)(3)(C).

"(13) SIGNIFICANTLY DEVIATED.—The term 'significantly deviated' means Earned Value Management variance that is at least 20 percent from the Original Baseline.

"(b) Core IT Investment Projects Designation.—Except as provided under paragraph (2), each Chief Information Officer, with approval by the Agency Head, shall-

"(1) identify the major IT investments that are the most crit-

ical to the agency; and

"(2) any project as a core 'IT investment project' or a 'core project', upon determining that the project is a mission critical IT investment project that-

"(A) represents a significant high-dollar value relative to the average IT investment project in the agency's portfolio;

"(B) delivers a capability critical to the successful completion of the agency mission, or a portion of such mission;

"(C) incorporates unproven or previously undeveloped technology to meet primary project technical requirements;

"(D) would have a significant negative impact on the successful completion of the agency mission if the project experienced significant cost, schedule, or performance deviations.

"(c) Cost, Schedule, and Performance Reports.-

 $^{\prime\prime}$ (1) QUARTERLY REPORTS.—Not later than 14 days after the end of each fiscal quarter, the project manager for an IT investment project shall submit a written report to the Chief Information Officer that includes, as of the last day of the applicable quarter-

"(A) a description of the cost, schedule, and performance of all projects under the project manager's supervision;

"(B) the original and current project cost, schedule, and performance benchmarks for each project under the project manager's supervision;

"(C) the quarterly and cumulative cost, schedule, and performance variance related to each IT investment project under the project manager's supervision since the com-

mencement of the project;
"(D) for each IT investment project under the project manager's supervision, any known, expected, or anticipated changes to project schedule milestones or project performance benchmarks included as part of the original or current baseline description;

"(E) the current cost, schedule, and performance status of all IT investment projects under supervision that were previously identified as significantly deviated or grossly devi-

ated; and

"(F) any corrective actions taken to address problems dis-

covered under subparagraphs (C) through (E).

"(2) Interim reports.—If the project manager for an IT investment project determines that there is reasonable cause to believe that an IT investment project has significantly deviated or grossly deviated since the issuance of the latest quarterly report, the project manager shall submit to the Chief Information Officer, not later than 14 days after such determination, a report on the project that includes, as of the date of the report-

(A) a description of the original and current program

cost, schedule, and performance benchmarks;

"(B) the cost, schedule, or performance variance related to the IT investment project since the commencement of the

"(C) any known, expected, or anticipated changes to the project schedule milestones or project performance benchmarks included as part of the original or current baseline description;

"(D) the major reasons underlying the significant or gross

deviation of the project; and

"(E) a corrective action plan to correct such deviations.

"(d) Determination of Significant Deviation.—

"(1) CHIEF INFORMATION OFFICER.—Upon receiving a report under subsection (c), the Chief Information Officer shall—

"(A) determine if any IT investment project has signifi-

cantly deviated; and

"(B) report such determination to the Agency Head.

"(2) Congressional Notification.—If the Chief Information Officer determines under paragraph (1) that an IT investment project has significantly deviated and the Agency Head has not issued a report to the appropriate congressional committees of a significant deviation for that project under this section since the project was last required to be rebaselined under this section, the Agency Head shall submit a report to the appropriate congressional committees, the Director, and the Government Accountability Office that includes—

"(A) written notification of such determination;

"(B) the date on which such determination was made;
"(C) the amount of the cost increases and the extent of the schedule delays with respect to such project;

"(D) any requirements that—

"(i) were added subsequent to the original contract;

"(ii) were originally contracted for, but were changed by deferment or deletion from the original schedule, or were otherwise no longer included in the requirements contracted for;

"(E) an explanation of the differences between—

"(i) the estimate at completion between the project manager, any contractor, and any independent analysis; and

"(ii) the original budget at completion;

"(F) a statement of the reasons underlying the project's significant deviation; and

"(G) a summary of the plan of action to remedy the sig-

nificant deviation.

"(3) DEADLINE.—

"(A) NOTIFICATION BASED ON QUARTERLY REPORT.—If the determination of significant deviation is based on a report submitted under subsection (b)(1), the Agency Head shall notify Congress and the Director in accordance with paragraph (2) not later than 21 days after the end of the quarter upon which such report is based.

"(B) NOTIFICATION BASED ON INTERIM REPORT.—If the determination of significant deviation is based on a report submitted under subsection (b)(2), the Agency Head shall notify Congress and the Director in accordance with paragraph (2) not later than 21 days after the submission of

such report.

"(C) METHOD OF DELIVERY.—Information required under paragraphs (1) and (2) may be provided through the Web

site established under section 11302(c)(1) in a manner consistent with guidance from the Office of Management and Budget to satisfy reporting requirements and to reduce paperwork.

"(e) Determination of Gross Deviation.—

"(1) CHIEF INFORMATION OFFICER.—Upon receiving a report under subsection (c), the Chief Information Officer shall-

"(A) determine if any IT investment project has grossly

deviated; and

"(B) report any such determination to the Agency Head. "(2) Congressional notification.—If the Chief Information Officer determines under paragraph (1) that an İT investment project has grossly deviated and the Agency Head has not issued a report to the appropriate congressional committees of a gross deviation for that project under this section since the project was last required to be rebaselined under this section, the Agency Head shall submit a report to the appropriate congressional committees, the Director, and the Government Accountability Office that includes—

"(A) written notification of such determination, which

states-

"(i) the date on which such determination was made;

"(ii) an indication of whether or not the project has been previously reported as a significant or gross deviation by the Chief Information Officer, and the date of any such report;

"(B) incorporations by reference of all prior reports to

Congress on the project required under this section; "(C) updated accounts of the items described in subpara-

graphs (C) through (G) of subsection (d)(2);

"(D) the original estimate at completion for the project manager, any contractor, and any independent analysis;

"(E) a graphical depiction that shows monthly planned expenditures against actual expenditures since the com-

mencement of the project;

"(F) the amount, if any, of incentive or award fees any contractor has received since the commencement of the contract and the reasons for receiving such incentive or award fees;

"(G) the project manager's estimated cost at completion and estimated completion date for the project if current requirements are not modified;

"(H) the project manager's estimated cost at completion and estimated completion date for the project based on rea-

- sonable modification of such requirements;
  "(I) an explanation of the most significant occurrence contributing to the variance identified, including cost, schedule, and performance variances, and the effect such occurrence will have on future project costs and program sched-
- ule;
  "(J) a statement regarding previous or anticipated rebaselining or replanning of the project and the names of the individuals responsible for approval;

"(K) the original life cycle cost of the investment and the expected life cycle cost of the investment expressed in constant base year dollars and in current dollars; and

"(L) a comprehensive plan of action to remedy the gross deviation, and milestones established to control future cost,

schedule, and performance deviations in the future.

(3) METHOD OF DELIVERY.—Information required under paragraphs (1) and (2) may be provided through the Web site established under section 11302(c)(1) in a manner consistent with guidance from the Office of Management and Budget to satisfy reporting requirements and to reduce paperwork.

"(3) REMEDIAL ACTION.

"(A) IN GENERAL.—If the Chief Information Officer determines under paragraph (1) that an IT investment project has grossly deviated, the Agency Head, in consultation with the Chief Information Officer, shall develop and implement a remedial action plan that includes—

"(i) a report that-

"(I) describes the primary business case and key

functional requirements for the project;

"(II) describes any portions of the project that have technical requirements of sufficient clarity that such portions may be feasibly procured under

firm, fixed-price contract;

"(III) includes a certification by the Agency Head, after consultation with the Chief Information Officer, that all technical requirements have been reviewed and validated to ensure alignment with the reported business case;

"(IV) describes any changes to the primary business case or key functional requirements which

have occurred since project inception; and

"(V) includes an independent government cost estimate for the project conducted by an entity approved by the Director;

"(ii) an analysis that-

"(I) describes agency business goals that the

project was originally designed to address;
"(II) includes a gap analysis of what project deliverables remain in order for the agency to accomplish the business goals referred to in subclause(I);

"(III) identifies the 3 most cost-effective alternative approaches to the project which would achieve the business goals referred to in subclause

(I); and "(IV) includes a cost-benefit analysis, which com-

pares-

"(aa) the completion of the project with the completion of each alternative approach, after factoring in future costs associated with the termination of the project; and

"(bb) the termination of the project without pursuit of alternatives, after factoring in fore-

gone benefits; and

"(iii) a new baseline of the project is established that is consistent with the independent government cost esti-

mate required under clause (i)(V); and

"(iv) the project is designated as a core IT investment project and subjected to the requirements under subsection (f).

"(B) Submission to congress.—The remedial action plan and all corresponding reports, analyses, and actions under this paragraph shall be submitted to the appropriate congressional committees and the Director.

 $\widetilde{C}(C)$  Reporting and analysis exemptions.-

"(i) In GENERAL.—The Chief Information Officer, in coordination with the Agency Head and the Director, may forego the completion of any element of a report or analysis under clause (i) or (ii) of subparagraph (A) if the Chief Information Officer determines that such element is not relevant to the understanding of the difficulties facing the project or further continuation of the project in a timely and cost-efficient manner.

(ii) Identification of reasons.—The Chief Information Officer shall include the reasons for not including any element referred to in clause (i) in the report

submitted to Congress under subparagraph (B).

"(4) Deadline and funding contingency.

"(A) Notification and remedial action based on

QUARTERLY REPORT.-

"(i) IN GENERAL.—If the determination of gross deviation is based on a report submitted under subsection (c)(1), the Agency Head shall-

"(I) not later than 45 days after the end of the quarter upon which such report is based, notify the appropriate congressional committees and the Director in accordance with paragraph (2); and

"(II) not later than 180 days after the end of the quarter upon which such report is based, ensure the completion of remedial action under paragraph

"(ii) FAILURE TO MEET DEADLINES.—If the Agency Head fails to meet the deadlines described in clause (i)(II), additional funds may not be obligated to support expenditures associated with the project until the requirements of this subsection have been fulfilled.

"(B) NOTIFICATION AND REMEDIAL ACTION BASED ON IN-TERIM REPORT.

"(i) IN GENERAL.—If the determination of gross deviation is based on a report submitted under subsection

(c)(2), the Agency Head shall-

(I) not later than 45 days after the submission of such report, notify the appropriate congressional committees in accordance with paragraph (2); and "(II) not later than 180 days after the submission of such report, ensure the completion of remedial action in accordance with paragraph (3).

"(ii) FAILURE TO MEET DEADLINES.—If the Agency Head fails to meet the deadlines described in clause (i)(II), additional funds may not be obligated to support expenditures associated with the project until the

requirements of this subsection have been fulfilled.
"(f) ADDITIONAL REQUIREMENTS FOR CORE IT INVESTMENT

Project Reports.-

"(1) INITIAL REPORT.—If a report described in subsection (e)(3)(A) has not been submitted for a core IT investment project, the Agency Head, in coordination with the Chief Information Officer and responsible program managers, shall prepare an initial report for inclusion in the first budget submitted to Congress under section 1105(a) of title 31, United States Code, after the designation of a project as a core IT investment project, which includes—
"(A) a description of the primary business case and key

functional requirements for the project;

"(B) an identification and description of any portions of the project that have technical requirements of sufficient clarity that such portions may be feasibly procured under firm, fixed-price contracts;

"(C) an independent government cost estimate for the

project;
"(D) certification by the Chief Information Officer that all technical requirements have been reviewed and validated to ensure alignment with the reported business case; and

"(E) any changes to the primary business case or key functional requirements which have occurred since project

inception.

"(2) QUARTERLY REVIEW OF BUSINESS CASE.—The Agency Head, in coordination with the Chief Information Officer and responsible program managers, shall-

"(A) monitor the primary business case and core functionality requirements reported to Congress and the Director for designated core IT investment projects; and

"(B) if changes to the primary business case or key functional requirements for a core IT investment project occur in any fiscal quarter, submit a report to Congress and the Director not later than 14 days after the end of such quarter that details the changes and describes the impact the changes will have on the cost and ultimate effectiveness of the project.

"(3) ALTERNATIVE SIGNIFICANT DEVIATION DETERMINATION.— If the Chief Information Officer determines, subsequent to a change in the primary business case or key functional requirements, that without such change the project would have signifi-

cantly deviated—

"(A) the Chief Information Officer shall notify the Agency

Head of the significant deviation; and

"(B) the Agency Head shall fulfill the requirements under subsection (d)(2) in accordance with the deadlines under subsection (d)(3).

"(4) ALTERNATIVE GROSS DEVIATION DETERMINATION.—If the Chief Information Officer determines, subsequent to a change in the primary business case or key functional requirements, that without such change the project would have grossly deviated"(A) the Chief Information Officer shall notify the Agency

Head of the gross deviation; and

"(B) the Agency Head shall fulfill the requirements under subsections (e)(2) and (e)(3) in accordance with subsection (e)(4)."

\* \* \* \* \* \* \*

#### §11319. Acquisition and development

(a) Purpose.—The objective of this section is to significantly reduce—

(1) cost overruns and schedule slippage from the estimates es-

tablished at the time the program is initially approved;

(2) the number of requirements and business objectives at the time the program is approved that are not met by the delivered products; and

(3) the number of critical defects and serious defects in deliv-

ered information technology.

"(b) Establishment of Programs.—The Director of the Office of

Management and Budget shall—

(1) Not later than 180 days after the date of the enactment of this section, prescribe uniformly applicable guidance for agencies to implement the requirements of this section, which shall not include any exemptions to such requirements not specifically authorized under this section; and

(2) Take any actions that are necessary to ensure that Federal agencies are in compliance with the guidance prescribed pursuant to paragraph (1) not later than 1 year after the date of the

enactment of this section.

(c) ESTABLISHMENT OF PROGRAM.—Not later than 120 days after the enactment of this section, the Agency Head (as defined in section 11317(a) of title 40, United States Code) shall establish a program to improve the information technology (referred to in this section as IT) process overseen by the Chief Information Officer.

(d) Program Requirements.—Each program established pursu-

ant to this section shall include—

"(1) a documented process for information technology acquisition planning, requirements development and management, project management and oversight, earned-value management, and risk management;

"(2) the development of appropriate metrics for performance

measurement of—

"(A) processes and development status; "(B) continuous process improvement; and

"(C) achievement of project outcomes;

"(3) a process to ensure that key program personnel have an appropriate level of experience and training and education, at an institution or institutions approved by the Director, in the planning, acquisition, execution, management, and oversight of information technology;

"(4) a process to ensure that the applicable department and subcomponents implement and adhere to established processes and requirements relating to the planning, acquisition, execution, management, and oversight of information technology pro-

grams and developments; and

"(5) a process for the Chief Information Officer to intervene or stop the funding of an IT investment if it is at risk of not

achieving major project milestones.

"(e) Annual Report to OMB.—Not later than the last day of February of each year, the Agency Head shall submit a report to Congress that includes-

"(1) a detailed summary of the accomplishments of the program established by the Agency Head pursuant to this section;

"(2) the status of completeness of implementation of each of the program requirements, and the date each such requirement was deemed to be completed;

"(3) the percentage of Federal IT projects covered under the program compared to all of the IT projects of the agency, listed by number of programs and by annual dollars expended;

"(4) a detailed breakdown of the sources and uses of the amounts spent by the agency during the previous fiscal year to

support the activities of the program;

(5) a copy of any guidance issued under the program and a statement regarding whether each such guidance is mandatory; (6) the identification of the metrics developed in accordance

with subsection (b)(2);

"(7) a description of how paragraphs (3) and (4) of subsection (b) have been implemented and any related agency guidance; and

"(8) a description of how continuous process improvement has

been implemented and the objectives of such guidance.

(f) ANNUAL REPORT TO CONGRESS.—The Director of the Office of Management and Budget shall provide an annual report to Congress on the status and implementation of the program established pursuant to this section.

 $\bigcirc$