United States Environmental Protection Agency

Federal Information Technology Acquisition Reform Act

Implementation Plan and Chief Information Officer Assignment Plan

December 18, 2015
V 1.1.1

Revision Table

Version	Date	Comments
1.0	August 14, 2015	Original Submission
1.1	November 14. 2015	Address OMB Comments
1.1.1	December 18, 2015	Address OMB to clarify participation in pre-Exhibit 100 portfolio reviews

1 Executive Summary

The Environmental Protection Agency (EPA) is pleased to present its plan to implement the Office of Management and Budget (OMB) Common Baseline Controls for the Federal Information Technology Acquisition Reform Act (FITARA).

Soon after OMB's initial release of a draft Common Baseline, EPA recognized that FITARA posed a game changer for IT management. EPA established an interim Chief Information Office (CIO) IT acquisition review process that has provided many valuable lessons learned as to both what FITARA can accomplish and how we can incorporate existing practices into the implementation. EPA also leveraged outcomes from previously initiated projects that had implications for FITARA, particularly with regard to IT skill sets. We hosted conversations between program and IT leadership on FITARA requirements and implementation approaches. And we leveraged resources from GSA's 18F program to start infusing EPA IT management practices with proven methodologies for rapid delivery of user-focused requirements.

The 17 controls of the Common Baseline are grouped around 3 major themes. These are listed below, along with EPA's high-level strategy for meeting the objectives of those controls.

Budget Formulation and Planning Controls

The first set of FITARA controls engage the CIO in the budget process to ensure that IT needs are properly planned and resourced. EPA has several practices in play that support our ability to meet these controls, including a unique "Exhibit 100" Capital Planning and Investment Control (CPIC) process that gathers BY IT investment budget estimates in the second quarter of the fiscal year, and an IT coding scheme that identifies all IT budget items in the IT Portfolio (formerly the Exhibit 53). To fully meet the spirit of these controls, EPA will introduce "pre-Exhibit 100" portfolio reviews with the Programs and Regions to ensure the CIO has sufficiently in-depth knowledge of IT system purpose, roadmaps, and plans to ensure they are resourced correctly in the budget submission.

Acquisition and Execution Controls

This set of controls establishes solid communication and engages the CIO with the programs and regions to ensure that their IT plans are well designed, directly drive agency strategic objectives, and follow best practices. The "pre-Exhibit 100 reviews" listed above will also support these controls. In addition, EPA will build on the interim acquisition review processes already put in place to update and synchronize our CPIC, System Life Cycle Management (SLCM), and acquisition review processes around the objectives of these controls.

Organization and Workforce Controls

This set of controls engages the CIO more heavily with key IT decision-makers across EPA and engenders plans to refresh IT skills within OEI and across programs and regions. In this section, EPA names its "Bureau" CIOs and provides plans to onboard permanent employees with needed IT skills as well as to create a constant refresh of IT best practices and ideas via a two-year Fellowship program.

EPA looks forward to working with OMB to perfect and implement this plan.

Table of Contents

2 Introduction

The Environmental Protection Agency (EPA) is pleased to present its plan to implement the OMB controls for the Federal Information Technology Acquisition Reform Act (FITARA). This plan incorporates lessons learned from practices put in place since the first draft Common Baseline was published, developments from initiatives that started before FITARA was enacted, and ideas developed in consultation with agency staff and leadership over the past several months.

Incorporating Lessons Learned

EPA implementation efforts are already underway, specifically with regard to requirements that the Chief Information Officer (CIO) approve Information Technology (IT) acquisitions. The CIO started conducting acquisition reviews in April 2015, and these reviews have been such a valuable source of lessons learned that EPA has identified several specific objectives of its own for the FITARA implementation. These include:

- Avoiding vendor lock-in by letting contracts with multiple vendors or confining the scope of the contract to a limited task
- Driving down out-year operations and maintenance (O&M) costs
- Ensuring use of Agile development methodologies
- Ensuring ease of migration from aging technology platforms
- Avoiding development of duplicative systems
- Avoiding development of systems available via Commercial off the Shelf Services (COTS)
- Ensuring proper leveraging of shared services and SharePoint platforms
- Developing acquisition vehicles that support the agency in the objectives listed above

Incorporating Developments from New Initiatives

While FITARA offers powerful tools for helping EPA achieve these objectives, other initiatives over the past two years have helped lay the groundwork for our plans.

Ongoing conversations between the EPA Office of Environmental Information (OEI) and its customer organizations have driven plans for a significant reorganization of OEI. This reorganization plan focuses on improving delivery of IT services and has tactical outcomes directly related to FITARA controls concerning the upkeep of IT skill sets. Relatedly, early retirement plans enacted at EPA in FY14-15 allowed all EPA programs, including OEI, to identify their priorities for modernizing skill sets to meet current mission requirements.

To round out EPA's preparatory actions for implementing FITARA, we have appointed a new Chief Technology Officer (CTO) from GSA's 18F program. This individual brings an invaluable track record in establishing Agile technology and acquisition practices, and has already started bringing them to play in major EPA IT projects.

Incorporating Input from Agency Leadership

EPA recognized from the outset that FITARA would be a significant game changer in IT management. While FITARA was enacted specifically to empower CIOs to be more accountable for agency IT planning and spending, EPA's approach to developing this plan extended well beyond the CIO staff. When the initial OMB draft baseline was published in early 2015, OEI initiated discussions with the CFO, the CAO, and the EPA programs and regions to familiarize them with the requirements and to elicit opinions for implementation. We have held several discussions with agency leadership and IT staff as to what gaps exist and what processes should be implemented to address them. We have also had candid conversations as to the impact on current operations. The CIO's position during these discussions has sought to seek balance between achieving the objectives described above and maximizing re-use of existing processes so that EPA can implement FITARA with minimal burden added to our programs and regions as they pursue our mission.

EPA Organization and Impact on FITARA Implementation

For purposes of understanding this plan, it is worthwhile to take a few moments to address some key points about the organization of EPA and how IT fits into that organization.

EPA is an independent agency, and has no "bureaus" per se. However, the primary organizational structures of the EPA that could be considered equivalent to bureaus are:

- *Program Offices*. These offices, located mostly in DC Headquarters (HQ), are organized around the key mission areas of EPA (Air, Water, Solid Waste and Emergency Response, Pesticides, Compliance) as well as around EPA business needs – (Chief Financial Officer, General Counsel, Administration, and OEI). From an IT management perspective, it is important to note that many of the Program Offices maintain enterprise mission IT systems, but that OEI provides basic IT infrastructure and services.

- *Regional Offices*. EPA includes 10 regional offices, each of which oversees all aspects of key EPA missions in their jurisdictions. As such, they do not create or maintain enterprise mission systems. But they do maintain basic IT infrastructure needed to support day to day work.

While there are some organizational structures (program laboratories located within regions) that do not fully fall within these categories, the description above is sufficiently clear to show that the IT responsibilities of the regions are different from the IT responsibilities of the program offices at HQ. Those differences will be reflected in this implementation plan.

Organization of this Plan

Finally, we would like to take a moment to discuss the construction of this plan. The OMB baseline consists of 17 independent controls, each of which requires a gap analysis and an implementation plan. While some of these controls can be addressed as stand-alone actions, EPA will address most of them via one or more of three major FITARA-driven EPA initiatives:

1. Amending the CPIC process to include CIO-led pre-Exhibit 100 portfolio reviews in the programs and regions.
2. Revising the acquisition process to include CIO involvement in IT acquisitions
3. Reorganizing OEI to include adoption of a Digital Services consulting team

Because the FITARA implementation is reliant on these major changes, the plan will be presented in thematic groups of controls rather than on a control-by-control basis. The plan is organized along the same groupings (Budget Formulation and Planning Controls, Acquisition and Execution Controls, Organization and Workforce Controls) that are provided in the OMB template for the Self-Assessment plan. Within each of these sections, the plan presents the OMB controls, documents existing practices that support those controls, describes actions needed to complete implementation of the controls, and provides a table of milestones for doing so. Within this construct, the plan also makes a point of documenting how larger actions map back to specific controls to allow for traceability.

With these comments, EPA is pleased to present its FITARA Implementation Plan.

3 EPA FITARA Implementation Plan

3.1 Budget Formulation and Planning Controls

The first set of FITARA controls engage the CIO in the budget process to ensure that IT needs are properly planned and resourced. The budget formulation process at EPA is a distributed process. EPA hosts budget planning conferences in May and June that result in a set of guidance and targets issued by the Office of the Chief Financial Officer (OCFO) in July. Each program and region then updates its budget submission numbers in the Budget Automation System (BAS) to roll up into the overall budget. IT resources are encoded within the budget numbers to provide information as to system size, lifecycle stage, and other specifics that are consistent with the capital planning and investment control (CPIC) process. EPA's plan is to build on this process to ensure that the CIO is confident that budget numbers are based on sound planning, sound estimating, and required visibility.

Table 1 lists the FITARA Budget Formulation and Planning Controls.

Table 1
Budget Formulation and Planning Controls

CIO Responsibility	CXO Responsibility
A1. Visibility of IT resource plans/decisions to CIO. The CFO and CIO jointly shall define the level of detail with which IT resource levels are described distinctly from other resources throughout the planning, programming, and budgeting stages. This should serve as the primary input into the IT capital planning and investment control documents submitted with the budget (formerly Exhibits 53 and 300).	**A2. Visibility of IT resource plans/decisions in budget materials.** The CFO and CIO jointly shall define the level of detail with which IT resource levels are described as detailed in AI.
B I. CIO role in pre-budget submission for programs that include IT and overall portfolio. The agency head shall ensure the agency-wide budget development process includes the CFO, CAO, and CIO in the planning, programming, and budgeting stages for programs that include IT resources (not just programs that are primarily IT oriented). The agency head, in consultation with the CFO, CIO, and program leadership, shall define the processes by that program leadership works with the CIO to plan an overall portfolio of IT resources that achieve program and business objectives and to develop sound estimates of the necessary IT resources for accomplishing those objectives.	**B2. CIO role in pre-budget submission for programs that include IT and overall portfolio.** The agency head shall ensure the agency-wide budget development process includes the CFO, CAO, and CIO as described in B I and that CIO guidelines are applied to the planning of all IT resources during budget formulation. The CFO and program leadership shall work jointly with the CIO to establish the processes and definitions described in B I.

CIO Responsibility	CXO Responsibility
C.1. CIO role in planning program management. The CIO shall be included in the internal planning processes for how the agency uses IT resources to achieve its objectives. The CIO shall approve the IT components of any plans, through a process defined by the agency head that balances IT investments with other uses of agency funding. This includes CIO involvement with planning for IT resources at all points in their Iifecycle, including operations and disposition or migration.	**C2. CIO role in program management.** CIO, CFO, and program leadership shall define an agency-wide process by that the CIO shall advise on all planning described in C I.
DI. CIO reviews and approves major IT investment portion of budget request. Agency budget justification materials in their initial budget submission to OMB shall include a statement that affirms: • the CIO has reviewed and approves the major IT investments portion of this budget request; • the CFO and CIO jointly affirm that the CIO had a significant role in reviewing planned IT support for major program objectives and significant increases and decreases in IT resources; and • the IT Portfolio (formerly Exhibit 53) includes appropriate estimates of all IT resources included in the budget request.	**D2. CIO and CFO Certify IT Portfolio.** The CFO shall work with the CIO to establish the affirmations in Dl.

3.1.1   How Current EPA Practices Support these Controls

EPA already has several practices in place that will help address this set of controls:

1. EPA has a unique CPIC process which requires iterative builds on the CPIC documentation. In the second quarter of the fiscal year, all CPIC owners, major and non-major, are required to submit in CPIC an "Exhibit 100" entry. This entry provides their first estimate of their BY submission numbers. It also provides basic information on any new investments that will be introduced to the CPIC portfolio. This provides the CIO and the Information Investment Review Board (IIRB) an early look at proposed IT budget estimates for CPIC investments. During the third quarter, owners of CPIC major and CPIC medium investments submit an "Exhibit 200" investment update, which provides project management and milestone updates on projects. These processes help conduct a progressive build on the OMB Exhibit 300 updates that are submitted annually as part of the budget submission.
2. The CIO participates in May and June budget conferences, and can provide input to the budget memo that OCFO issues to provide final guidance to programs. This guidance can request specific data concerning IT numbers in the submission.
3. EPA has an IT coding structure that is used to identify all line items in BAS that will be incorporated into the IT Portfolio Summary (formerly known as the Exhibit 53).   The IT Portfolio Summary is inclusive of costs for CPIC investments, non-CPIC applications, and Working Capital fund infrastructure provisioning.
4. The EPA Office of Acquisition Management (OAM) also conducts annual data calls on projected acquisitions (IT and non-IT).

3.1.2 Actions to complete implementation

While the EPA CIO has several opportunities to review budget estimates and numbers over the course of the year, in order to fully meet the objectives of these controls, EPA will introduce new practices to ensure that the CIO is sufficiently engaged with IT planning in the programs and the regions to have meaningful understanding of their IT and IT resource requirements.

Starting in FY16Q1, the CIO will meet with program offices, the CFO, and the CAO to conduct a "pre-Exhibit 100" review of the mission portfolios. These reviews will assess the CPIC and application portfolios of each program, or the infrastructure portfolios of the regions to allow the CIO to engage meaningfully in both the strategic planning and the accompanying resource estimating to support those plans. They will include designates from the CFO and CAO. As alluded to in the Introduction, these program reviews will be sufficiently robust that they will inform EPAs response to budget planning controls, other controls as called out throughout the rest of this document, and pertinent PortfolioStat or GAO audit findings. As such, these reviews will be referred to in subsequent sections of this report to address how they will meet additional controls.

Table 2 below shows the controls that will be addressed and the meeting outcomes that will address controls related Budget Formulation and Planning.

Table 2
Objectives of the "pre-Exhibit 100 review"

Control	Meeting outcome
A. **Visibility of IT resource plans/decisions to the CIO**	Based on the outcomes of discussions related to Controls B and C, (as well as to other controls addressed throughout this document), the CIO will be able to identify specific areas of visibility required for IT during the budget planning processes.
B. **CIO Role in pre-budget submission for programs that include IT and overall Portfolio; &** C. **CIO role in planning program management.**	The CIO will review the entire portfolio of CPIC investments and applications for each program to understand the business need met, lifecycle phase, strategies for development/maintenance in the BY, and resources required to meet those objectives. The CIO will provide input into each of these and suggest alternative strategies if applicable. If necessary, the CIO will schedule follow-up discussions to assess feasibility of those alternatives and revised resource estimates. As necessary, output of these meetings will feed the instructions for the Exhibit 100 data call.
D. **CIO reviews and approves Major IT investment portion of the budget request.**	The outcome of these meetings, combined with final review processes developed in conjunction with the CFO, will provide the CIO with the ability to make the required affirmations starting with the BY18 cycle.

EPA will merge the outcomes of the controls listed in Table 2 with the annual budget formulation cycle. Table 3 shows how the CIO will use this data during the budget formulation and submission processes.

Table 3
Integration of CIO into the IT Budget Approval process

Timeframe	Action
October - December	CIO conducts initial batch of pre-Exhibit 100 portfolio reviews. This includes a review of each program/region's: • Infrastructure/investments, to include review investment purpose, performance metrics, annual budget, projected end date, history of TechStat or FITARA reviews, and drivers for change that affect strategic planning and budget formulation • Organization and governance topics • Upcoming acquisitions
January	CIO issues Exhibit 100 data call with updated input based on pre-Exhibit 100 portfolio reviews conducted to date; results due in February
January - March	CIO completes pre-Exhibit 100 portfolio reviews.
April	EPA receives OMB planning targets
May-June	EPA holds budget planning discussions. CIO brings results of pre-Exhibit 100 portfolio reviews as well as data from the Exhibit 100 data call to discuss IT budget needs.
June-July	CFO issues Final Agency Targets Guidance to agency for building budget submission. CIO reviews and approves instructions with regard to the IT portion of the guidance.
August	CIO and CFO conduct joint review of the IT portion of the budget submission.
September	CIO participates in the final budget review with CFO and Deputy Administrator; signs affirmations required by OMB for FITARA.

3.1.3   Milestones

Table 4 provides EPA's key milestones for coming into compliance with these controls.

Table 4
Budget Formulation and Planning Milestones

Date	Milestone
9/30/2015	Conduct pilot pre-Exhibit 100 reviews for 1 program office and 1 regional office. Use results to develop briefing templates and preparation SOPs for subsequent reviews. Part of the outcome of these pilots should be to synchronize information requirements with those of OCFO and CAO to reduce duplicative data calls on programs.
11/30/2015	Complete at least 3 additional Program and 3 additional regional pre-Exhibit 100 reviews

Date	Milestone
12/31/2015	As a result of pre-Exhibit 100 reviews completed to date: ☐ Document revised instructions for the Exhibit 100 data call ☐ Document any requirements for visibility of IT resource planning ☐ Document any final revisions to the templates and standard operating procedures required to meet the objectives of Controls B and C ☐ Document a Standard Operating Procedure for these reviews with swim lanes for all affected programs and stakeholders
3/31/2016	Complete the remaining program and regional reviews. EPA envisions that the first year will require at least 2 quarters to complete these reviews, but that in subsequent years we may be able to streamline the schedule.

3.2 Acquisition and Execution Controls

EPA envisions that this set of controls will more heavily engage the CIO with the programs and regions to ensure that their IT plans are well designed, directly drive agency strategic objectives, and follow best practices. As noted in the previous section, the "pre-Exhibit 100 reviews" will be key to addressing these objectives. In addition, EPA will build on the interim acquisition review processes already put in place to update and synchronize our CPIC, SLCM, and acquisition review processes.

Table 5 lists the Acquisition and Execution Controls

Table 5
Acquisition and Execution Controls

CIO Controls	CXO Controls
E1. Ongoing CIO engagement with program managers. The CIO should establish and maintain a process to regularly engage with program managers to evaluate IT resources supporting each agency strategic objective. It should be the CIO and program managers' shared responsibility to ensure that legacy and on-going IT investments are appropriately delivering customer value and meeting the business objectives of programs.	E2. **Ongoing CIO engagement with program managers.** Program managers shall work with the CIO to define IT performance metrics and strategies to support fulfillment of agency strategic objectives defined in the agency's strategic plan.
F1. Visibility of IT planned expenditure reporting to CIO. The CFO, CAO and CIO should define agency-wide policy for the level of detail of planned expenditure reporting for all transactions that include IT resources.	F2. **Visibility of IT planned expenditure reporting to CIO.** The CFO, CAO and CIO shall define agency-wide policy for the level of detail of planned expenditure reporting for all transactions that include IT resources.
G1. **CIO defines IT processes and policies**. The CIO defines the development processes, milestones, review gates, and the overall policies for all capital planning, enterprise architecture, and project management and reporting for IT resources. At a minimum, these processes shall ensure that the CIO certifies that IT resources are adequately implementing incremental development (as defined in the below definitions). The CIO should ensure that such processes and policies address each category of IT resources appropriately—for example, it may not be appropriate to apply the same process or policy to highly customized mission-specific applications and back office enterprise IT systems depending on the agency environment. These policies shall be posted publicly at agency.gov/digitalstrategy, included as a downloadable dataset in the agency's Public Data Listing, and shared with OMB through the IDC.	[None]

CIO Controls	CXO Controls
H1. CIO role on program governance boards. In order to ensure early matching of appropriate IT with program objectives, the CIO shall be a member of governance boards that include IT resources (including "shadow IT" or "hidden IT"—see definitions), including bureau Investment Review Boards (IRB). The CIO shall notify OMB of all governance boards the CIO is a member of and at least annually update this notification.	**H2. Participate with CIO on governance boards as appropriate.**
II. Shared acquisition and procurement responsibilities. The CIO reviews all cost estimates of IT related costs and ensures all acquisition strategies and acquisition plans that include IT apply adequate incremental development principles (see definitions).	**12. Shared acquisition and procurement responsibilities.** The CAO, in consultation with the CIO and-where appropriate-CFO, shall ensure there is an agency-wide process to ensure all acquisitions that include any IT: • are led by personnel with appropriate federal certifications; • are reviewed for opportunities to leverage acquisition initiatives; • are supported by cost estimates that have been reviewed by the CIO; and • adequately implement incremental development.
J I. CIO role in recommending modification, termination, or pause of IT projects or initiatives. The CIO shall conduct TechStat reviews or use other applicable performance measurements to evaluate the use of the IT resources of the agency. The CIO may recommend to the agency head the modification, pause, or termination of any acquisition, investment, or activity that includes a significant IT component based on the CIO's evaluation, within the terms of the relevant contracts and applicable regulations.	[None]
K I. CIO review and approval of acquisition strategy and acquisition plan. Agencies shall not approve an acquisition strategy or acquisition plan (as described in FAR Part 724) or interagency agreement (such as those used to support purchases through another agency) that includes IT without review and approval by the agency CIO. For contract actions that contain IT without an approved acquisition strategy or acquisition plan, the CIO shall review and approve the action itself. The CIO shall primarily consider the following factors when reviewing acquisition strategies and acquisition plans: • Appropriateness of contract type; • Appropriateness of IT related portions of statement of needs or statement of work; • Appropriateness of above with respect to the mission and business objectives supported by the IT strategic plan; and • Alignment with mission and program objectives in consultation with program leadership.	**K2. CAO is responsible for ensuring contract actions that contain IT are consistent with CIO approved acquisition strategies and plans**. The CAO shall indicate to the CIO when planned acquisition strategies and acquisition plans include IT. The CAO shall ensure the agency shall initiate no contract actions or interagency agreements that include IT unless they are reviewed and approved by the CIO or are consistent with the acquisition strategy and acquisition plan previously approved by the CIO.

CIO Controls	CXO Controls
L1. CIO Approval of Reprogramming. The CIO must approve any movement of funds for IT Resources that requires Congressional notification.	**L.2. CIO Approval of Reprogramming**. The CFO shall ensure any notifications under L.1. are provided by the CIO prior to submission to OMB.

3.2.1   How Current EPA Practices support these controls

Controls E, F, and H are addressed at a very high level via the CIO's participation in IT governance boards. The CIO is the chair of the Quality Information Council (QIC). The QIC was created in 1999 as a forum to address enterprise-wide issues and to develop Agency policies to guide EPA decision makers in the area of information technology/information management.   It has four subcommittees to support its IT governance work, including the IT Investment Review Board (IIRB), on which the CIO also sits. Through these channels, the CIO gets some insight into IT systems planning, IT planned spend, and of course, IT governance. The CIO also sits on governance boards for high-visibility IT projects and initiatives, including e-Enterprise and e-Manifest. The CIO will survey IT leadership to compile a list of other boards which require CIO membership, whether in person or delegated through the assignment plan.

OEI is currently reviewing the QIC Charter and subcommittee structure to look for opportunities modernize the governance objectives and streamline the subcommittee structure. An initial set of recommendations is targeted for the end of September.

In addition, the IT Portfolio Summary is the baseline document for defining IT Planned Expenditure reporting to the CIO. The CPIC team creates several views of the IT Portfolio Summary data for the CIO over the course of the CPIC cycle, including breakdown by program, by CPIC category, and by O&M/DME.

Control G Requires no further action. Per the EPA delegations manual, the CIO has the authority to "Establish policies and procedures for the management and security of records, files, data, and information systems and technology." EPA policies are reviewed periodically for update, and it is worth noting that two key IT policies, the CPIC policy and the SLCM policy, will be updated and sent into agency review during 2015. That review will include incorporating FITARA, such as ensuring that the SLCM policy provides guidance for developing systems with Agile or modular approaches. Also, IT policies will be posted per FITARA requirements.

Control J. EPA did conduct three TechStat reviews in FY15, all tailored to supporting the objectives of e-Enterprise. The FITARA Acquisition Reviews and pilot pre-Exhibit 100 reviews conducted to date have already provided opportunities for the CIO to "modify" project direction on items such as system acquisition strategies, accelerated deployments, alternative development platforms, and initiation of next-generation projects. For example, during the pre-acquisition FITARA release process to review our e-Manifest project, EPA restructured the e-Manifest strategy to bring Agile development work in-house and to outsource only non-technical work. Using this approach, EPA has met its interim milestone to build a minimal viable product pilot by September 30.

Controls I and K are currently addressed by an interim IT acquisition review process. During Q2 FY15, the CIO issued a data call to understand the landscape of IT acquisitions through the end of the fiscal year. Based on the responses, the CIO initiated a series of FITARA reviews. Program offices were asked to submit their SOWs and IGCEs, as well as prepare a briefing with responses to a list of questions (including questions as to the use of incremental development). (See Appendix A). Based on those reviews, the CIO issued decisions of with either "Approve" or "Approve with Conditions."

These reviews have been a valuable source of lessons learned for the CIO, and have helped set a series of objectives for the CIO in implementing FITARA. These objectives include:

- Avoiding vendor lock-in by letting contracts with multiple vendors or confining the scope of the contract to a limited task
- Driving down out-year O&M costs
- Ensuring use of Agile development methodologies
- Ensuring ease of migration from aging technology platforms
- Avoiding development of duplicative systems
- Avoiding development of systems available via COTS
- Ensuring proper leveraging of shared services and SharePoint platforms

In addition, EPA has hired a new Chief Technology Officer (CTO) who has started working with program offices to implement user-focused, agile/modular approaches into system planning. He is incorporating many of the practices used at the GSA 18F program (https://18f.gsa.gov) and is developing a plan for institutionalizing these at EPA.

Control L will be incorporated into procedures. However, budget reprogramming actions that require Congressional notification have been very rare at the EPA.

3.2.2   Actions to Complete Implementation

EPA requires closer coordination between the CIO and the program offices and regions in the area of IT systems planning and review to meet the objectives of Controls E, F, and J. That closer coordination is envisioned to begin with the pre-Exhibit 100 reviews introduced in the previous section. Table 6 indicates the meeting outcomes that will enable the EPA to meet these objectives.

Table 6
Objectives of the "pre-Exhibit 100 review"

Control	Meeting outcome
E. Ongoing engagement with program managers	These meetings are envisioned to occur at least annually, with intermittent touchbacks as required. In addition, the meetings will include review of proposed benefits and performance metrics of systems so that the CIO can participate in "shared responsibility" for delivering customer value and meeting business objectives.

Control	Meeting outcome
F. Visibility of IT planned expenditures	As noted with control A, the in-depth portfolio review will inform the CIO and CFO of areas of visibility required for both IT budget planning and expenditure planning. For example, one area where planned expenditure planning is critical is in our e-Rulemaking program. This is a shared system funded by users across the Federal government, but delays in receipt of user fees based on Continuing Resolution or other factors can hinder EPA's ability to make its planned expenditures on this contract.
J. CIO role in recommending modification, termination, or pause of IT projects	Data collected during these reviews concerning budget, schedule, deployment strategy, or success in delivery of benefits can provide early indicators of systems that require a deeper TechStat review.

Regarding **Control H**, OEI needs to complete its assessment of its own IT governance structure to evaluate whether it serves the needs of IT customers, and whether it is sufficiently linked to other program governance boards to provide the CIO with needed awareness and influence in Agency decisions on IT planning and resources. OEI will complete its review and recommendations during Q1 FY16.

Regarding **Controls I and K**, EPA needs to further develop the IT acquisition review process to engage the CIO earlier in decision process. In the interim process, the CIO has been engaged either immediately prior to award or prior to the release of the RFP package. The final process will engage the CIO farther upstream in acquisition decisions in order to better shape the acquisition strategy. In addition, the CIO will provide tools that help programs and regions introduce more competition in their programs, make faster awards, and better introduce Agile methodologies into development work where appropriate. Actions to support this include:

1. Update and synchronize CPIC, SLCM, and FITARA practices (and policy documents) to ensure CIO decision points at the following milestones:
    a. Certification of requirement for an IT acquisition. The CIO will review the business request and determine whether an IT acquisition is required or whether required capability already exists.
    b. Approval of the Acquisition Strategy. The CIO will review the Acquisition Strategy and issue a decision to:
        i. Approve strategy without conditions (e.g., no further FITARA review required)
        ii. Approve strategy with conditions (e.g., require a second review prior to release of the procurement package to vendors)
        iii. Disapprove
2. Update the SLCM policy documentation to support Agile development processes
3. Work with Office of Acquisition Management (OAM) to ensure that EPA's acquisition strategy addresses all elements of interest to the CIO (see Appendix A) and can be easily routed and reviewed via EPA's Enterprise Acquisition System (EAS). Pilot this process.
4. Establish under the new CTO Digital Service offerings within OEI, consistent with the US Digital Services Playbook, that help EPA regions and programs implement modern IT program management, development, and acquisition practices.   This will include:
    a. Project Management and Consulting Services
    b. Technical Architecture and Consulting Services

      c. Pilot Data Visualization Development Teams
      d. Agile Acquisition Consulting and Acquisition Vehicle Support

Regarding **Control J**, it is EPA's intention to continue using acquisition reviews and pre-Exhibit 100 reviews to surface significant issues early enough that we can take corrective actions prior to requiring a TechStat. The questions addressed during acquisition reviews are included in Appendix A, and include points such as acquisition strategy, agile development, hosting and security, risk, and other items that could be the point of a modify/terminate decision. In the Pre-Exhibit 100 reviews we gather data on system benefits and performance metrics and key change drivers that could be relevant to CIO decisions. The CIO will reserve the right to call for a TechStat review where reviews indicate the need for a closer look at risk, technical roadmap, or design approach. In addition, EPA is currently revising its System Lifecycle Management Procedure (see language for controls I and K) to accommodate Agile systems development. As we move away from waterfall procedures to Agile, EPA will engage Modify/Terminate decisions in more incremental fashion.   For example, a new project may be incrementally funded to provide a minimum viable product (MVP). Upon review of the MVP, EPA would determine whether to fund further development, to reassess project direction, or to stop further funding.

Regarding **Control L**, EPA needs to ensure a standard operating procedure is in place for these notifications. The CIO and CFO will work to ensure the proper procedural documents are identified and updated with the statement "OCFO will require the signature of the EPA CIO on a Congressional Programming Request document."

3.2.3   Milestones

Table 7 contains the milestones for this task

Table 7
Milestones for Acquisition and Execution Controls

Date	Milestone
9/30/2015	• **[Controls E, F, H, J]** Complete pilot pre-Exhibit 100 reviews for one program office and one regional office • **[Control H]** Complete initial alternatives analysis for QIC restructuring • **[Controls I, K]** Finalize an IT review template that can be routed through EAS to support a FITARA review and track any conditions. • **[Controls I, K]** Build an initial e-Manifest minimum viable product working demo using Agile methods • **[Controls I, K]** Kick off efforts with GSA's 18F program to build an Agile acquisition vehicle for EPA

Date	Milestone
10/30/2015	• **[Control H]** Complete assessment of IT governance board structure within OEI. • **[Controls I, K]** Pilot FITARA review template with an existing project. Pilot should assess (1) effectiveness of routing structure (e.g., CIO receives the request during the correct stage of the acquisition process); (2) effective delivery of needed information to the CIO; (3) effective capture and tracking of conditions. Capture any needed revisions. • **[Controls I,K]** Complete draft of revised SLCM procedures and guidance to provide guidance on incorporating Agile and modular approaches into system life cycle management • **[Control L]** Identify appropriate Standard Operating Procedure (SOP) to review for obtaining CIO approval on reprogramming
11/30/2015	• **[Controls E, F, H, J]** Complete at least 3 additional Program and 3 additional regional pre-Exhibit 100 reviews • **[Controls I, K]** Pilot revised FITARA review in EAS
12/31/2015	• **[Controls E, F, H, J]** As a result of pre-Exhibit 100 reviews completed to date: ☐ Document revised instructions for the Exhibit 100 data call ☐ Document any requirements for visibility of IT resource planning ☐ Document any final revisions to the templates for the pre-Exhibit 100 reviews • **[Controls E, F, H, J]** Document a Standard Operating Procedure for these reviews with swim lanes for all affected programs and stakeholders • **[Controls E, F, H, J]** Survey IT leadership to identify governance boards which require CIO membership, either in person or by delegation through the assignment plan. • **[Controls I, K]** Complete updated instructions for completing FITARA reviews in EAS • **[Controls I, K]** Pilot an acquisition using the Agile acquisition vehicle • **[Controls L]** Update appropriate SOP for CIO approval of IT funds reprogramming

3.3 Organization and Workforce Controls

EPA envisions this set of controls as key activities the get the CIO more heavily engaged with key IT decision-makers across EPA as well as to engender a plan to refresh IT skills within OEI and across programs and regions.

Table 8 lists the Organization and Workforce Controls

Table 8
Organization and Workforce Controls

CIO Control	CXO Control
MI. CIO approves bureau CIOs. The CIO shall be involved in the recruitment and shall approve the selection of any new bureau CIO (includes bureau leadership with CIO duties but not title-see definitions). The title and responsibilities of current bureau CIOs may be designated or transferred to other agency personnel by the agency head or his or her designee as appropriate, and such decisions may take into consideration recommendations from the agency CIO.	[None]
N I. CIO role in ongoing bureau CIOs' evaluations. The CHCO and CIO shall jointly establish an agency-wide critical element (or elements) included in all bureau CIOs' performance evaluations. In cases where the bureau CIO is a member of the Senior Executive Service and the agency uses the Basic SES Appraisal System, this critical element(s) is an "agency-specific performance requirement" in· the Executive Performance Plan. Each such agency may determine that critical element(s) (ECQs) contain these requirements. For agencies that do not use the Basic SES Appraisal System or for bureau CIOs who are not members of the SES, then these shall be critical elements in their evaluations. The [agency] CIO must identity "key bureau CIOs" and provide input to the rating official for this critical element(s) for at least all "key bureau CIOs" at the time of the initial summary rating and for any required progress reviews. The rating official will consider the input from the [agency] CIO when determining the initial summary rating and discusses it with the bureau CIO during progress reviews.	**N2. CIO role in ongoing bureau CIOs' evaluations**. The CHCO and CIO shall jointly establish an agency-wide critical element (or elements) for the evaluation of bureau CIOs as described in N I.

CIO Control	CXO Control
O1. Bureau IT Leadership Directory. CIO and CHCO will conduct a survey of bureau CIOs and CIO and CHCO will jointly publish a dataset identifying all bureau officials with the title or duties of a CIO. This shall be posted as a public dataset base on instructions in the IDC by August 15, 2015, and kept up-to-date thereafter. The report will identify for each: • Employee Type (e.g., SES, GS, SL) • Career or Appointed • Full time or part time • Evaluation "rating official" • Evaluation "reviewing official" (if used) • Whether individual is a "key bureau CIO"	**02. Bureau IT Leadership Directory.** CHCO will work with CIO to develop the Bureau IT Leadership Directory as described in O I.
PI. IT Workforce. The CIO and CHCO will develop a set of competency requirements for IT staff, including IT leadership positions, and develop and maintain a current workforce planning process to ensure the department/agency can (a) anticipate and respond to changing mission requirements, (b) maintain workforce skills in a rapidly developing IT environment, and (c) recruit and retain the IT talent needed to accomplish the mission.	**P2. IT Workforce**. CIO and CHCO-and CAO where relevant-shall develop a set of competency requirements for IT staff, including IT leadership positions, and develop and maintain a current workforce planning process to ensure the department/agency can (a) anticipate and respond to changing mission requirements, (b) maintain workforce skills in a rapidly developing IT environment, and (c) recruit and retain the IT talent needed to accomplish the mission.
Q1. CIO reports to Agency Head or Deputy.	N/A

3.3.1 How Current EPA Practices Support These Controls

Controls M, N, and O: Bureau CIOs. The EPA does not currently employ a Bureau CIO construct. As noted earlier, Regions maintain their IT infrastructure, and this duty is carried out by individuals with the title Information Resource Management Branch Chief (IRM BC). Programs do not manage infrastructure, but to varying degrees they create and maintain enterprise mission IT systems. Within programs, the responsibility for planning the strategy, budget, and deployment plans for those systems is varyingly distributed between Senior Information Officers, Information Management Officers, IT Division Directors, and IT system managers. For purposes of this submission, EPA will name the IRM BCs as Bureau CIOs. Their names and information are listed in Appendix B and will be published at EPA's digital strategy site per OMB instructions. EPA also anticipates that as it conducts pre-Exhibit 100 reviews, it may determine whether a single Bureau CIO position could be consolidated within the Programs. We have consolidated a list of individuals with who have some degree of IT responsibilities in the Programs, and have included their names as "Candidate Bureau CIOs" in a separate list in the Appendix B. This list will not be published at the Digital Strategy site.

EPA does not anticipate designating "key" Bureau CIOs at this time.

Control P, IT Workforce. During FY14-15, EPA executed an early retirement program (Voluntary Separation Incentive Payments and Voluntary Early Retirement Authority) to meet budget reductions and to create targeted changes in its workforce skills set. Each program office and region developed its own targets according to its particular needs. OEI objectives included moving away from infrastructure management to information management, increasing skills for information technology project management and portfolio management, and realigning IT security functions.

During this same period, OEI, which has the bulk of IT staff for the agency, has been examining its own organizational structure to look for opportunities to improve performance and service delivery to the EPA. As part of that exercise, OEI documented objectives to improve:

- IT Service Delivery
- IT Planning
- Customer Relationship Management
- Security
- Information Management

As part of the reorganization exercise, OEI conducted extensive interviews with its own division directors to understand the position types and skill sets needed for current operations and service to the agency. The OEI team is working with the Office of Human Resources (OHR) to develop these requirements into modernized position descriptions that can be used within OEI and across the agency to recruit IT staff for current needs.

OEI also envisions developing a Systems Engineering and Project Management Division which will serve as a Center of Excellence for Agile system engineering and project management, to include consulting support and training for OEI and agency staff.

EPA has also founded a Project Management Community of Practice. This is a grass-roots organization open to all employees who have an interest in improving project management skills, including IT project management. This group includes a training workgroup which is identifying areas of requested training. EPA staff interested in pursuing professional certifications can also access our FAC-P/PM intranet resource site at http://oamintra.epa.gov/node/424

Control Q, no action needed. The CIO currently reports to the Administrator.

3.3.2   Actions to Complete Implementation

Controls M and N. EPA has identified its initial list of Bureau CIOs as the IRM BCs. EPA will still need to implement processes to engage the CIO in the selection of any new IRM BC to fully comply. Currently, the CIO does not consult on IRM BC appointments. EPA will need to check current personnel processes f or these positions and amend accordingly.

In addition, EPA still needs to address the requirement for a single performance appraisal element for all individuals serving in the role of a Bureau CIO. Under the current proposal, it could be fairly straightforward to develop a uniform standard because the IRM BCs have similar responsibilities. However, it is prudent to not draft a performance element based solely on the responsibilities of IRM BCs. The pre-Exhibit 100 portfolio reviews could result in the consolidation of a Bureau CIO position in

at least some of the Programs, and those positions would have somewhat different responsibilities than those of the IRM BCs. The pre-Exhibit 100 process may unearth issues of such significance that the CIO may want to make them the subject of those performance elements. Thus EPA will use the pre-Exhibit 100 process to determine whether to expand the list of Bureau CIOs and how to structure their performance objectives.   The Bureau CIO list will be updated, if needed, at the first annual update in 2016.

Control P: As part of its efforts to refresh IT skill sets, EPA is taking a three-pronged approach that combines acquiring permanent OEI staff with modern skill sets, introducing a two-year Fellowship program that will regularly infuse participating EPA programs with fresh talent and knowledge of cutting-edge IT practices, and conducting an IT Skillset Workforce Gap Analysis for the agency that will inform the development of recruiting and training requirements.

Acquisition of permanent OEI staff with modern skill sets. OEI will continue ongoing work with the Office of Human Resources to create updated position descriptions for IT staff that can be used across the agency for new recruitments.

Innovation Fellowship. OEI will create a Digital Services consulting team, based on the construct of GSA's 18F program, to assist program offices with system development and acquisitions. That team will stand up the EPA Innovation Fellowship program. This will bring in up to 50 experienced Agile and user-centered practitioners annually to embed in the programs for two-year fellowships. The Digital Services team will consult with interested programs to assess their particular skill set needs as well as the work culture so that a suitable candidate can be identified. Participating programs in turn must agree to abide by a set of values that ensure iterative, user-focused design. The Fellows brought in will be charged with delivering successful projects and engaging in skill set exchange with the EPA staff.   The two-to-four year refresh ensures that EPA regularly brings in staff with cutting edge practice and experience. The Fellowship will target specialties such as, but not limited to:

- Senior Technologists
- Software Developers
- User Experience (UX) Designers
- Product Managers
- Data Scientists
- Data Managers
- Security Specialists
- Acquisitions specialists

IT Skillset Workforce Gap Analysis. While the updated position descriptions will help OEI meet its workforce needs, and the Fellowship will impart vital skillsets to programs or regions who elect to participate, EPA still needs to take steps to evaluate the skillset needs of the Agency as a whole. This assessment will start in the second quarter of FY16, and will be completed by the end of FY16. This start date will allow us to leverage several items into the study plan, including:

1. Lessons learned from the Innovation Fellowship. The interviews conducted with the participating programs will provide some insight into EPA managers' knowledge of the current IT skillset marketplace.

2. Lessons learned from the OMB IT Workforce Capability Planning Group. This group was recently convened on the FITARA listserv, and EPA will be participating in those discussions.
3. Input from stakeholders, including Bureau CIOs and Unions.

3.3.3   Milestones

Table 9 contains the milestones for meeting the Organization and Workforce Controls

Table 9
Milestones for Organization and Workforce Controls

Date	Milestone
9/30/2015	• **[Controls M and N]** Complete pilot pre-Exhibit 100 reviews for one program office and one regional office • **[Controls M and N]** Identify any existing common performance elements among IRM BCs • **[Controls M and N]** Identify EPA processes for selecting IRM BCs • **[Control P]** Create the website for the EPA Innovation Fellowship Program and kick off recruitment efforts
10/30/2015	• **[Controls M and N]** Work with OCFO, CAO, and CHCO to identify any recommended revisions to IRM BC performance elements that might be needed to support generic Bureau CIO performance elements • **[Controls M and N]** Document revisions needed to processes for selecting IRM BCs to ensure sign-off by the CIO • **[Control P]** Complete revised draft IT position descriptions
11/30/2015	• [**Controls M and N**] Complete 3 additional Program and 3 additional Regional pre-Exhibit 100 reviews • **[Controls M and N]** Based on pre-Exhibit 100 reviews completed to date, identify key elements of a generic Bureau CIO performance element. • **[Control P]** Continue coordination between CIO and CHCO to finalize and sign off on IT position descriptions • **[Control P]** Complete literature review to support an EPA IT Skillset Workforce Gap Analysis project plan, to include reviews of previous EPA analyses and review of material provided by Gartner and the OMB IT Workforce Capability Planning Group.

Date	Milestone
12/31/2015	• **[Controls M and N]** Work with CHCO and Bureau CIO supervisors to incorporate into the next performance evaluation cycle • **[Controls M and N]** Update policies to ensure involvement of the CIO in the selection of IRM BCs and other potential Bureau CIOs • **[Control P]** Continue coordination between CIO and CHCO to finalize and sign off on IT position descriptions • **[Control P]** Select the first class of candidates for the EPA Innovation Fellowship program • **[Control P]** Complete initial framework for the EPA IT Skillset Workforce Gap Analysis Project Plan to include objectives, methodology, timeframes, stakeholder analysis and engagement plan, and assumptions/constraints. Begin stakeholder engagement.
2/19/16	• **[Control P]** Complete Gap Analysis Project plan, taking into account lessons learned from Fellowship Program and OMB IT Workforce Planning Capability Group.
3/31/16	• **[Control P]** Kick off EPA IT Skillset Workforce Gap Analysis Project Plan.
9/30/16	• **[Control P]** Complete IT Skillset Workforce Gap Analysis.

3.4 CIO Assignment Plan

EPA recognizes the need to allocate some FITARA authorities, particularly acquisition authorities, to personnel outside of the office of the CIO. At present, however, the CIO assignment plan will remain minimal. OEI is still garnering valuable lessons learned from the interim FITARA acquisition review processes, and is also using that process to ensure compliance with use of required acquisition vehicles. Thus EPA will maintain CIO responsibility for even fairly small dollar items in the near term but then phase increased authority to Programs and Regions by the end of the calendar year.

CIO presence on governance boards is an area that may require future assignment plans, but will be addressed following the completion of OEI's own revamping of its IT governance board structure. This re-examination of IT governance, conducted in concert with the FITARA implementation, will cause EPA to revisit several internal policy and governance documents. An initial list of these documents is included at Appendix C.

The CIO does not envision assigning out authority related to budget formulation.

The following table summarizes current assignment plans:

Authority	Assigned to	Control
Immediately: Government purchase of IT hardware or software under the micro-purchase limit ($3,500).	Information Management Officers and IRM BCs	IT procurements via purchase card are governed by EPA's purchase card policy. IMOs and IRM BCs are required to abide by policies for use of the purchase card in general and IT in particular. By 12/31/15, this dollar threshold may be increased per review of FY15 FITARA acquisition data. Regions and programs will be required to include any spend plans in their pre-Exhibit 100 portfolio reviews.
Immediately: Contractor procurement of IT hardware or software under $10,000.	IRM BCs (in regions) or Information Management Officers or Senior Information Officials (SIOs) in programs, according to existing practice. (Designation in the programs may change as program Bureau CIOs are identified.)	Programs and regions will submit quarterly reports on ODC expenditures.

Authority	Assigned to	Control
Immediately: Procurement of hardware or software via the Working Capital Fund, including the PC Purchase service of the Working Capital Fund	Local authorities for WCF procurement	The Working Capital Fund board has agency-wide representation and comes to agreement on equipment and services to be provided at an agreed upon price. No further review is required to ensure that equipment purchased meets FITARA objectives.
By 12/31/2015: Purchase of IT hardware procured via EPA's hardware Indefinite Delivery Indefinite Quantity (IDIQ) vehicle and the Emergency Response Equipment BPA.	IRM BCs (in regions) or Senior Information Officials (SIOs) in programs (designation to SIO may change as office Bureau CIOs are identified for programs).	Bureau CIOs will be required to report these procurements to OEI. In addition, the pre-Exhibit 100 portfolio reviews will ask for hardware requirements over the year, and compare to the IDIQ so the CIO can understand any differences between HW requirements and the provisions of the IDIQ. The CIO reserves the right to expand this authority to any other EPA acquisition vehicle identified by OAM.
By 12/31/2015: A list of specific hardware products and software license renewals, to be determined based on analysis of end-of-2015 IT spending and FY2016 IT spend plans.	IRM BCs (in regions) or Senior Information Officials (SIOs) in programs (designation to SIO may change as office Bureau CIOs are identified for programs).	Approval will be granted up to a given dollar amount with flexibility to increase by a given percent to account for options for using expiring funds. Contracting officers will be provided with these thresholds to ensure that Bureau CIOs do not exceed them.

Appendix A – Questions Addressed During Interim FITARA Reviews

☐ Indicate whether the purpose of the review is to approve a pending award or to approve release of a procurement package to vendors

☐ Describe the business need/program objectives for this acquisition

☐ Describe the scope of the contract in terms of services and materials to be procured; include the estimated dollar value

☐ If other acquisition actions will be needed to meet all program objectives, describe them here

☐ Describe the acquisition strategy in terms of contract type (Firm Fixed Price, Time and Materials, Cost Plus) and duration (e.g., base year plus X option years). Describe alternatives considered when determining this strategy.

☐ Describe any other alternatives discussed during process, e.g., buy vs. build, buy vs. lease, etc.

☐ Describe any hard deadlines or agency dependencies on this acquisition

☐ If the scope includes development, describe actions taken to ensure incremental development steps are followed

☐ Describe any use of brand name justifications, if applicable

☐ Describe any IT waivers required related to this acquisition, if applicable

☐ Describe how your program plans to leverage OARM's strategic sourcing vehicles, if applicable

☐ Describe any planned use of shared services associated with this acquisition

☐ Describe your approach to hosting and security

☐ Describe your SLA requirements, if applicable

☐ Describe how you created your cost estimate

☐ Is any CROMERR documentation required?

☐ Describe any key risks and your mitigation approach

☐ Describe how the vendor will work with EPA to comply with e-Discovery requests (e.g., FOIA) or records management requirements, if applicable

☐ Describe your Incorporation of Section 508 requirements

☐ Describe your incorporation of IPv6 requirements

☐ Indicate whether the purpose of the review is to approve a pending award or to approve release of a procurement package to vendors

☐ Describe the business need/program objectives for this acquisition

Appendix B – Bureau CIO List

Note: None of the personnel in this table are "key Bureau CIOs"

Program/ Region	Last Name	First Name	Appointment	Type	FT/PT	Rating Official
Region 1	Giffin	Thomas	Career	GS	Full Time	Fred Weeks
Region 2	Demarco	Frank	Career	GS	Part Time	Donald Pace
Region 3	O'Tormey	Carol	Career	GS	Full Time	Ron Borsellino
Region 4	Mills	Keith	Career	GS	Full Time	Ken LaPierre
Region 5	Tindall	Kenneth	Career	GS	Full Time	Cheryl Newton
Region 6	McFarland	Verne	Career	GS	Full Time	James McDonald
Region 7	Krehbiel*	Ben	Career	GS	Full Time	Luetta Flournoy
Region 8	Duran	Matt	Career	GS	Full Time	Rick Buhl
Region 9	Sullivan*	Peter	Career	GS	Full Time	Serena McIlwain
Region 10	Tyree	James	Career	GS	Full Time	Ed Chu

*Acting

Candidate Bureau CIOs

The following individuals have IT responsibilities within their Programs, but the responsibilities are distributed such that Programs do not have a single individual serving in the role of a Bureau CIO. As EPA conducts pre-Exhibit 100 Program Portfolio Reviews, we will assess whether it would be advantageous to consolidate a Bureau CIO in any given Program.

Program/ Region	Last Name	First Name	Appointment	Type	IT Responsibility FT/PT
Office of Administration and Resources Management	Showman	John	Career	SES	Part Time
	Settle	Steve	Career	GS	Full Time
	Wiskerchen	Nicholas	Career	GS	Full Time
	Lynch	Margaret	Career	GS	Full Time
	Etheridge	William	Career	GS	Full Time
	Wilson	Joe	Career	GS	Full Time
	Collard	Erin	Career	GS	Full Time
	Harris	Chanya	Career	GS	Full Time
	Caro	Vique	Career	GS	Full Time
Office of Air and Radiation	Laporte	Roy	Career	GS	Part Time
	Bullard	Pamela	Career	GS	Part Time
	Galano	Fidel	Career	GS	Part Time
	Minorics	Josh	Career	GS	Part Time
	Slade	Reginald	Career	GS	Part Time
Office of Chemical Safety and Pollution Prevention	Myrick	Pam	Career	GS	Part Time
	Schultz	Robert	Career	GS	Full Time
	Syed	Hamaad	Career	GS	Full Time
	Williamson	Tracy	Career	GS	Part Time
	Price	Michelle	Career	GS	Part Time
	Morales	Oscar	Career	SES	Part Time
	Hartman	Mark	Career	SES	Part Time
	Tran	Chi	Career	GS	Full Time
	Vineski	Steve	Career	GS	Full Time

Program/ Region	Last Name	First Name	Appointment	Type	IT Responsibility FT/PT
Office of Enforcement and Compliance Assurance	Badalamente	Mark	Career	SES	Part Time
	Dombrowski	John	Career	SES	Part Time
	James	Valerie	Career	GS	Part Time
Office of General Counsel	Lattimore	Craig	Career	SES	Part Time
	Blackmond	Victoria	Career	GS	Full Time
Office of International and Tribal Affairs	Abunassar	Elias	Career	GS	Full Time
	Schwimmer	Sergio	Career	GS	Full Time
Office of Research and Development	Blancato	Jerry	Career	SES	Full Time
	Updike	David	Career	GS	Full Time
	Brennan	Beverly	Career	GS	Full Time
Office of Solid Waste and Emergency Response	Wyman	Steve	Career	GS	Part Time
	Schaefer	Joe	Career	GS	Part Time
	Raia	Tony	Career	GS	Part Time
	Furr	Lori	Career	GS	Part Time
	Beasley	Lynn	Career	GS	Part Time
	Gattuso	Peter	Career	GS	Part Time
	Ward	Dondra	Career	GS	Part Time
	Schmitt	Steve	Career	GS	Full Time
Office of the Administrator	Howard	James	Career	GS	Full Time
Office of the Chief Financial Officer	Terris	Carol	Career	SES	Part Time
	Jones	Quentin	Career	SES	Full Time
	Dubbs	Kimberly	Career	GS	Part Time
Office of the Inspector General	Shields	Edward	Career	GS	Full Time

Appendix C – Policies and Guidance Documents that May be Updated as Part of FITARA

- Quality Information Council Charter
- Information Investment Review Board Charter
- EPA Delegations Manual
- System Life Cycle Management Policy and Procedures
- CPIC Policy and Procedures
- Senior Information Officials policy
- IT Approvals Under FITARA interim policy
- Accounting for Information Technology

Appendix D – Acronyms

BAS	Budget Automation System
CAO	Chief Acquisition Officer
CIO	Chief Information Officer
COTS	Commercial Off the Shelf
CPIC	Capital Planning Investment Control
CTO	Chief Technology Officer
EPA	Environmental Protection Agency
FITARA	Federal Information Technology Acquisition Reform Act
GSA	General Services Administration
HQ	Headquarters
IGCE	Independent Government Cost Estimate
IIRB	Information Investment Review Board
IT	Information Technology
O&M	Operations and Maintenance
OAM	Office of Acquisition Management
OCFO	Office of the Chief Financial Officer
OEI	Office of Environmental Information
OMB	Office of Management and Budget
QIC	Quality Information Council
SLA	Service Level Agreement
SLCM	System Life Cycle Management
SOW	Statement of Work
WCF	Working Capital Fund