



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
Office of the Chief Information Officer (M/CIO)

Information Technology Strategic Plan

(2018-2022)

Contents

Message from the CIO	
EXECUTIVE SUMMARY	4
Introduction	6
Framework	6
Drivers	6
USAID A GENCY MISSION & VISION	7
USAID IT Mission & Vision	7
USAID IT GOALS	7
Governance	8
References	8
BACKGROUND	9
STAKEHOLDER ANALYSIS	12
PROBLEM ANALYSIS	14
RESULTS FRAMEWORK	21
Operations Objectives (OOs) (AXXA)	21
Intermediate Results (IRs) (AXXA)	21
Illustrative Activities (IAs) (AXXB)	21
ILLUSTRATIVE METRICS (BXXC)	23
Assumptions	25
GOALS IN RESULTS FRAMEWORK FORMAT	26
Management Requirements	28
Resources for Achieving Objectives	28
Governance and Management Processes	28
CHANCE MANAGEMENT	30

Message from the CIO

USAID's mission is to lead the U.S. Government's international development and disaster assistance through partnerships and investments that save lives, reduce poverty, strengthen democratic governance, and help people emerge from humanitarian crises and progress beyond assistance. Just as technology has infused our day-to-day lives and changed the way we communicate, work, and relax, Information Technology (IT) is part of the foundation that enables USAID to fulfill its mission and support Agency operations (both programmatic and assistance). In collaboration with stakeholders and partners, we strive to deliver secure, efficient, and effective solutions that will enable USAID to accomplish its mission in the face of the COVID-19 pandemic, natural or man-made disasters, and an evolving information security threat landscape.

During the COVID-19 pandemic, USAID's IT products and services were critical to our continuity of operations and furthering the work of international development abroad. Our work has enabled the USAID workforce to maintain productivity in a remote work environment, while delivering new IT services to meet evolving business needs. Along side the the delivery of new services and supporting new methods of connecting a distributed workforce, IT security threats have loomed large with an ever increasing threat activity landscape and evolving federal IT security standards to face these threats. Within USAID's Office of the Chief Information Officer (M/CIO), we strive to continuously balance the need for innovation and new services with navigating the security landscape to deliver technology services and solutions that enable data-driven decisions and maximize the impact of our development efforts.

USAID's Information Technology Strategic Plan (ITSP) is a living strategy and has continued to evolve as the Agency's needs have changed over the years. M/CIO remains committed to investing in the innovative tools and platforms that will continue to help secure our networks and data globally, and help us keep pace with the Agency's ever-changing technology and information needs.

Patrick Robinson
Acting Chief Information Officer
USAID

| EXECUTIVE SUMMARY

Information Technology (IT) is a key enabler for USAID's mission, interwoven into all aspects of the Agency's operations while helping the Agency adapt to ever-changing challenges, gaps and opportunities. For the Agency to leverage IT effectively, M/CIO conducts strategic planning with key stakeholders from Bureaus, Independent Offices or Missions (B/IO/Ms) to develop and maintain a USAID Information Technology Strategic Plan (ITSP). Our focus on strategic initiatives has led to USAID receiving its 5th Federal IT Acquisition Reform Act (FITARA) "A" Grade in Dec 2021 ¹.



USAID's 5th FITARA "A" Grade

The ITSP for 2018 - 2022 presents our current information technology (IT) priorities and emphasizes our commitment to providing efficient, flexible, and secure information technology solutions. The ITSP recognizes that information technology plays an important role in support of an ambitious USAID mission². This ITSP follows the USAID *Results Framework* methodology and through this process notes the following core *Operational Objectives* for M/CIO:

- Technology Adoption
- Secure Operations Excellence
- Information
- Innovation

It identifies the various internal and external *Drivers* that face our office and lays out 12 *Intermediate Results* across the Operational Objectives. This strategy further discusses the issues that we face at USAID where M/CIO can play a part and enumerates 26 such *Challenges and Gaps*. To solve these, the ITSP produces a USAID *Technology Roadmap* that expands on the Challenges & Gaps identified in the ITSP. This Roadmap acts as a planning tool to support tactical and strategic planning, by matching short-term and long-term goals with specific People, Process, Technology Initiatives. This allows M/CIO to produce a proposed implementation schedule, namely the *Enterprise Transition Roadmap*.

Discussed below is the history of the current USAID ITSP (since 2016):

- The plan was initially created in **2016**. It incorporated extensive input gathered from stakeholders representing Agency Missions, Bureaus, and Independent Offices (M/B/IOs).
- Major updates were made to the plan in 2018. This version aligned the ITSP to USAID's Results Framework.

FITARA Scorecard

² USAID Mission, Vision and Values

- Updates were made to the plan in 2019. This update added sections on Artificial Intelligence, Zero Trust Network, Supply Chain Risk Management.
- Updates were made to the plan in **2020**. This update added new sections on:
 - Data Strategy
 - Workplace Innovation
 - **Hyperautomation**
- Updates were made to the plan in 2022. This update added new section on Internet of Things (IoT)

2 Introduction

FRAMEWORK

This ITSP follows the USAID Results Framework³ methodology. The Results Framework in the M/CIO ITSP has Operational Objectives, akin to Development Objectives. Operational Objectives are synonymous with Goals. Each Operational Objective is composed of Intermediate Results. Each Intermediate Result is accomplished via Illustrative Activities, which are akin to Sub Intermediate Results. Hence this ITSP discusses Operational Objectives, Intermediate Results and Illustrative Activities. The figure below maps the USAID Results Framework to the customized version used at M/CIO.



Customizing the USAID Results Framework for use at the Office of the CIO

DRIVERS

M/CIO has established the following key USAID Business drivers to help facilitate the achievement of the Agency's mission:

- 1. The recognition that development continues to be a pillar of United States foreign policy and national security strategy, along with diplomacy and defense.
- 2. A cyber threat to information and information systems that continues to grow in persistence, aggressiveness, and sophistication, with new threats emerging as the need to share and use information creates new vulnerabilities.
- 3. The expectation, across government, that government organizations will provide enhanced services while operating more responsively and more efficiently.
- 4. The opportunities, arising from rapid technological advances, for government organizations to operate more flexibly and effectively.
- 5. The growing trend, necessitated by the need for security, economy, and the more effective use of human resources, to centralize certain functions within specific parts of organizations.

In addition, various drivers, henceforth collectively termed as 'external inputs to USAID IT Strategy' include, but are not limited to, changes in overarching federal IT Strategy, general USAID Strategy ⁴, OMB

³ Results Framework (RF) | Program Cycle | Project Starter | US Agency for International Development

⁴ An example of a USAID strategy that may act as an external driver is the USAID <u>Digital Strategy</u>

mandates and directives, Presidential directives, new Regulations and Laws, emerging technology and changing market landscapes.

USAID AGENCY MISSION & VISION⁵

USAID Agency Mission

The Agency Mission as stated on the USAID website: On behalf of the American people, we promote and demonstrate democratic values abroad, and advance a free, peaceful, and prosperous world. In support of America's foreign policy, the U.S. Agency for International Development leads the U.S. Government's international development and disaster assistance through partnerships and investments that save lives, reduce poverty, strengthen democratic governance, and help people emerge from humanitarian crises and progress beyond assistance.

USAID Agency Vision

The Agency Vision as stated on the USAID website: Our objective is to support partners to become self-reliant and capable of leading their own development journeys. We make progress toward this by reducing the reach of conflict, preventing the spread of pandemic disease, and counteracting the drivers of violence, instability, transnational crime and other security threats. We promote American prosperity through investments that expand markets for U.S. exports; create a level playing field for U.S. businesses; and support more stable, resilient, and democratic societies. We stand with people when disaster strikes or crisis emerges as the world leader in humanitarian assistance.

USAID IT MISSION & VISION

USAID IT Mission

Deliver secure technology solutions and information management services to support the execution of USAID's mission in international development.

USAID IT Vision

A future in which technological innovation and use of information technology will fundamentally transform how USAID accomplishes its mission in international development.

USAID IT GOALS

USAID IT goals are represented by the following Operational Objectives.

- Technology Adoption Increase user satisfaction and adoption of IT services.
- Secure Operations Excellence Improve operations and information security to ensure that the infrastructure supporting all services is reliable, efficient, and meets service level agreements.
- Information Improve access and presentation of information for USAID and its partners.
- Innovation Lead by innovation to provide Agency staff and its partners with state of the art capabilities in a timely fashion.

-

⁵ Per <u>USAID</u> website

GOALS	
Operational Objectives	Intermediate Results
Technology Adoption	Deliver IT solutions, not just systems
	Deliver business solutions on client's business schedules
	Invest in cloud solutions that provide fast, inexpensive service
Secure Operations Excellence	Network service delivery, performance, and reliability improved
	Information Security Improved
	IT costs are fully understood and communicated to business owners and consumers
Information	Provide state of the art solutions
	Motivate M/CIO staff to deliver excellence
Innovation	Provide state of the art solutions
	Motivate M/CIO staff to deliver excellence

GOVERNANCE

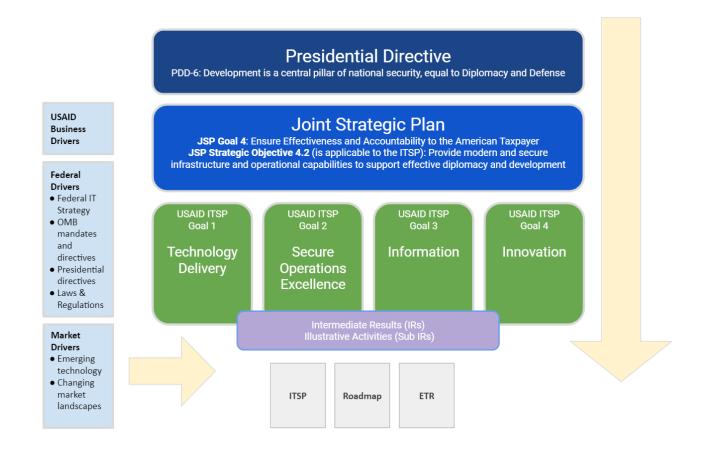
This document will be updated and reviewed on an annual basis or in the event of a major change dictated by aforementioned drivers.

REFERENCES

- Joint Strategic Plan (FY 2018 2022, updated Feb 2018)
- USAID Results Framework
- USAID ITSP [External] (2016-2021) & USAID ITSP [Internal] (2016-2021)
- USAID Technology Roadmap (2018-2021)

3 BACKGROUND

This section summarizes the flow of what guides and influences the current ITSP and the artifacts that are produced during the IT Strategy Management Process at M/CIO.



USAID ITSP Alignment Map: How does the ITSP align with Presidential Directives, the JSP and various Drivers at USAID

The Presidential Policy Directive on Global Development (PPD-6), recognizes that development is vital to U.S. national security and is a strategic, economic, and moral imperative for the United States. It calls for the elevation of development as a core pillar of American power and charts a course for development, diplomacy and defense to mutually reinforce and complement one another in an integrated comprehensive approach to national security. It provides clear policy guidance to all U.S. Government agencies and enumerates our core objectives, our operational model, and the modern architecture we need to implement this policy.

The Joint Strategic Plan (between the U.S. Department of State and USAID) lays out a Joint Strategic Goal Framework. It lays out 4 broad goals:

Goal 1: Protect America's Security at Home and Abroad

- Goal 2: Renew America's Competitive Advantage for Sustained Economic Growth and Job Creation
- Goal 3: Promote American Leadership through Balanced Engagement
- Goal 4: Ensure Effectiveness and Accountability to the American Taxpayer

Under Goal 4, Strategic Objective 4.2 is applicable to the ITSP: Provide modern and secure infrastructure and operational capabilities to support effective diplomacy and development

STATE-USAID JOINT STRATEGIC GOAL FRAMEWORK

Goal 1: Protect America's Security at Home and Abroad 1.2: Defeat ISIS, al-Oa'ida and 1.5: Strengthen U.S. border I.I: Counter the 1.3: Counter instability, 1.4: Increase capacity and security and protect U.S. Proliferation of other Transnational terrorist transnational crime, and strengthen resilience of our Weapons of Mass organizations, and counter violence that threatens U.S. partners and allies to deter citizens abroad Destruction (WMD) state-sponsored, regional, and interests by strengthening aggression, coercion, and and their Delivery local terrorist groups that citizen-responsive malign influence by state and Systems threaten U.S. national security governance, security, non-state actors democracy, human rights, interests and rule of law Goal 2: Renew America's Competitive Advantage for Sustained Economic Growth and Job Creation 2.2: Promote healthy, educated and productive 2.1: Promote American prosperity by advancing 2.3: Advance U.S. economic security by ensuring bilateral relationships and leveraging populations in partner countries to drive inclusive security, combating corruption, and promoting international institutions and agreements to and sustainable development, open new markets market-oriented economic and governance open markets, secure commercial and support U.S. prosperity and security reforms opportunities, and foster investment and objectives innovation to contribute to U.S. job creation Goal 3: Promote American Leadership through Balanced Engagement 3.1: Transition nations from **3.2:** Engage international fora to 3.3: Increase partnerships with the 3.4: Project American values and further American values and foreign assistance recipients to enduring private sector and civil society leadership by preventing the spread diplomatic, economic, and policy goals while seeking more organizations to mobilize support and of disease and humanitarian relief security partners equitable burden sharing resources and shape foreign public opinion 4.1: Strengthen the effectiveness 4.2: Provide modern and secure 4.3: Enhance workforce 4.4: Strengthen security and safety and sustainability of our infrastructure and operational of workforce and physical assets performance, leadership, diplomacy and development engagement, and accountability to capabilities to support effective investments diplomacy and development execute our mission efficiently and effectively

Aligning IT Strategy to the Dept of State's Joint Strategic Goal Framework

The **IT Strategy Management Process Description Document** (<u>PDD</u>) describes the strategy development and management Process. It details the process activities, interfaces, and process inputs/outputs. Roles and responsibilities are defined for each process activity.

The ITSP discusses *Challenges & Gaps* faced by USAID from a business and technical perspective. To solve these, the ITSP produces a **USAID Technology Roadmap** that expands on the Challenges & Gaps identified in the ITSP. It acts as a planning tool to support tactical and strategic planning, by matching short-term and long-term goals with specific people, process, technology *Initiatives*. This allows M/CIO to produce a proposed implementation schedule, named the **Enterprise Transition Roadmap** (ETR).

4 STAKEHOLDER ANALYSIS

The Office of the CIO's primary stakeholders are USAID personnel that plan, implement and support international development programs. These individuals are geographically dispersed across more than 85 field offices around the globe. Remote work assignments provide USAID staff opportunities for personal growth and development, but can also create challenges. For example, staff can feel isolated from friends, family, or from American culture. Worries about health risks increase. Working in remote locations with poor infrastructure can be frustrating because more time is spent on the job than if they were working in developed countries.

There is a remarkable diversity in the cultural and language backgrounds of USAID's staff. US citizens and foreign nationals from 80 countries work with each other on a daily basis. Staff bring with them a wide variety of technical skills and educational achievements. USAID employs infrastructure engineers, HIV/AIDS experts, water quality, malaria prevention, agriculture, budget & accounting, procurement, and many other specialties that facilitate and support international development programs.

Other significant stakeholders include USAID's partners and the citizens in the host countries where the agency works. Agency business is accomplished solely through its partnerships. These partnerships are typically with non-governmental organizations, other international aid agencies, universities, or foreign nationals. Our stakeholders ask that the Office of the CIO continually remind itself of this when providing the tools that USAID staff need.

Stakeholders utilize a wide variety of data to plan, implement, and evaluate our international development programs. The concepts of collaborating, learning and adapting are integrated into every project and activity — with data and data analysis constantly used to guide the work. Our stakeholders tell us that almost all of USAID's development data is created by our external partners, or through staff collaboration with those partners. USAID has adopted a medium data risk appetite in regards to information technology and open data (the amount and type of risk that an organization is willing to take in order to meet their strategic objectives), which allows much of our information to be shared, learning to take place, and projects to achieve better outcomes.

The international development environment changes frequently and our stakeholders have to adapt to those shifting conditions. They express an ever-increasing need for IT systems that can be stood up quickly, adapt to their changing needs, and are available on their schedules. Agency staff frequently work when traveling between offices, from remote locations in other countries, or from their homes. In order to improve their productivity, stakeholders have asked for an ecosystem of mobile, connected devices -- everything from tablets to phones to wearable devices. They express the need for tools and access to Agency information and resources that allows them to be productive from anywhere.

Agency funding is expected to decrease significantly over the next several fiscal years. Stakeholders are saying that they will spend less money on overhead items, including technology. And in order to be more effective in their work, stakeholders are looking for faster approvals, better partnerships, more effective processes, and cheaper, business-aligned technology solutions.

Sources of Information for this Stakeholder Analysis

1. **2016 Stakeholder Interviews** - More than 30 stakeholders across USAID were asked to identify their successes and challenges with the Office of the CIO. These stakeholders

- represented their own interests, as well as the interests of related offices and overseas Missions. While this continues to form the basis of this ITSP, the Office of the CIO intends to conduct additional stakeholder interviews in FY21 to gather additional insights and context regarding stakeholder future business needs, challenges and gaps.
- 2. **Summits and Workshops** M/CIO participates in events attended by Chiefs of Mission, Program Officers, Executive Officers, Controllers, and other USAID personnel. Interviews are conducted and feedback is solicited from stakeholders during these events.
- 3. Customer Service Survey (2020 CSS) In support of Agency Transformation and the ongoing effort to improve customer services at USAID, especially important during this unprecedented time of virtual operations, the Bureau for Management, under the direction of the Agency's Performance Improvement Officer (PIO), administers an annual survey to all Agency staff to solicit feedback from the users of support services. USAID collects data to continuously improve customer service and enhance its capacity to efficiently and effectively deliver on its mission. The information from the 2020 CSS serves as input to the strategic planning process.
- 4. **Federal Employee Viewpoint Survey (2019 FEVS)** The Office of Personnel Management Federal Employee Viewpoint Survey (OPM FEVS) measures employees' perceptions of whether, and to what extent, conditions characteristic of successful organizations are present in their agencies. The results provide agency leaders insight into areas where improvements have been made, as well as areas where improvements are needed. The information from the 2019 FEVS serves as input to the strategic planning process.

5 PROBLEM ANALYSIS

USAID cannot implement international development projects without access to timely, accurate data and the technology that makes it accessible. Without its IT systems, network components, supporting infrastructure or tools, USAID cannot manage its activities, cannot procure goods and services, cannot keep track of its funds, and cannot manage its employees.

Quoting from the Listening Report for State and USAID (June 2017), "A regular and consistent complaint among people is information technology, whether those be the outdated tools and systems used, the inability for various systems to interact and coordinate, or how State and USAID are working with tools of a bygone era while military and other agency colleagues use what works in today's day and age."

In their private lives, our stakeholders are accustomed to rapid improvements in technology and - in some cases - rapid declines in costs. The Office of the CIO struggles to meet these expectations. Stakeholders say that IT services are slow to launch, costly to run, and are wrapped in confusing regulations and complex processes.

The section below represents the **Challenges and Gaps** that we face at USAID where the Office of the CIO can play a part.

- I. International Development: A change to the way that USAID manages its international development requires significant modifications to the ways the Agency manages information as well as significant changes to several enterprise-level computer systems. The Development Information Solution (DIS), which is an agency-wide portfolio management system being rolled out globally in phases, enables USAID staff and implementing partners to perform a broad range of business operations, reporting and planning tasks in one place. DIS is designed to meet the need for high quality, readily available data by integrating program funding, awards, contract information and development results into a single platform. Its rollout is underway but it will take a few years before USAID can reap the full benefits of DIS worldwide. § ETR A1.2.
- 2. **Finding Information:** Stakeholders are unsure where to find the most relevant, trustworthy information to answer their questions. Moreover, staff often cannot find information they need to do their work and make timely decisions. When stakeholders do arrive at a USAID portal or data source, they use USAID search engines that look only in specific areas and typically do not return desired results. Agency search engines often show large quantities of outdated or unrelated information, and create a lack of confidence in search results. Stakeholders say that search engines on the Internet typically provide better results than searches within USAID data sources. § ETR A1.3.
- 3. Integration: As would be the case for any large enterprise, there is a significant demand for data and application integration. To enter information, staff typically input data into many systems, which not only causes data redundancy and duplication of effort but also introduces potential for error, not to mention the cost of data duplication across the enterprise. To use information, stakeholders typically spend large amounts of time and use multiple software tools to pull data from many sources into a usable dataset. This creates inefficiencies and, even worse, poor or untimely decisions. The result is dissatisfaction at all levels of the Agency. Stakeholders need accurate, integrated information and the ability to understand what that information means. While USAID already has integration related capabilities, these need to be modernized and consolidated. § ETR A1.4.

- 4. **Delivers Solutions, not IT Systems:** Stakeholders report that IT systems are often provided to them without an explanation as to how the tools meet their needs or how they can be used to improve daily work. Stakeholders say that they want solutions that meet needs to manage, access, and use information efficiently. They need training, coaching, information services, and business and technical support to help them work with digital information and use IT systems effectively. In addition, stakeholders strongly suggest that IT delivery focus on usability and a good user experience to improve productivity. § ETR A1.5.
- 5. **Business Systems on a Business Schedule:** Stakeholders need IT systems or services that support their business needs on the business schedules they have been assigned. They report that the Office of the CIO often has challenges delivering. When this happens, stakeholders have problems getting their work done and become frustrated. In some cases, stakeholders build or buy tools on their own, recognizing that this is the only way they can solve their business needs on their timelines. Stakeholders expect the Office of the CIO to take ownership and to provide the capacity needed to deliver business systems on business schedules. While the Office of the CIO has considerably improved its Demand Management process to intake Stakeholder requests and provide management of ensuing Projects, end-to-end processes can be further improved. § ETR A1.6.
- 6. Hosting for Web Applications and Websites: Stakeholders need fast, easy, and cost-effective access to application and web hosting platforms. In some cases, these environments need to be secured for internal use by USAID staff only. In other cases, they need to be opened up for external use with partners. Stakeholders often need technical assistance in setting up their environment, keeping it running, keeping it safe from hackers and malware, and archiving the data. In some cases, stakeholders require development expertise to build applications or web sites; the Office of the CIO is being asked to provide this. The office of the CIO can further enhance stakeholders satisfaction by providing application development capabilities to create business centric applications and web platforms. § ETR A1.7.
- 7. Understanding IT Services and their Costs: The Office of the CIO understands the costs to run its business at the Exhibit 53 level but does not currently know its individual IT services, nor the costs for those services. This creates challenges when trying to defend funding requests for new services or for items that support a service. It also makes it difficult to benchmark existing services or to compare costs of similar products. Staff are not productive when they don't know what is available, what it can do for them, or how much it will cost them. Investment oversight staff are frustrated that they cannot make informed business decisions. There are a few ongoing efforts (e.g. TBM taxonomy collaboration with GSA, selection of a financial tool to capture and report costs at IT component level, integrating IT hardware and software information with systems & services) that will help the Office of the CIO to better understand IT costs at service level, currently this work is in progress. § ETR A1.8.
- 8. **Mobile Application Development:** Mobile applications are often provided as part of business solutions offerings at USAID. Some USAID Missions and offices are developing their own mobile applications and in some cases, mobile apps are developed for use by external partners. In a few cases, USAID staff have apps created to help them with their own work. Mobility is already embedded in the USAID ecosystem through various efforts and services and this fast moving space needs to be regularly examined to determine which advances in Mobility are applicable and most impactful to USAID. While USAID is investing in new Mobile Application Development platforms, stakeholders need clear guidance on which tools, platforms, policies, procedures, standards should be used. § ETR A1.9.

- 9. External Collaboration: USAID implements its projects and activities almost exclusively through external partnerships. USAID staff cannot be effective when they can't plan, schedule, work, or communicate with external partners. Staff need a way to stand up technology for external collaboration, have it running in a short period of time, give external stakeholders access to it, and have someone manage the content from inception through the archival process. The office of the CIO has made several technology selections (e.g. Google Suite of tools, VTC tools, presence, chat etc.) in light of this need. The Office of the CIO has also ensured that external partner collaboration functionality is included as a major requirement in the new agency-wide CRM solution that is being evaluated. § ETR A1.10.
- 10. **Project Scheduling and Project Management:** Staff, particularly CORs and AORs, implement system development activities and need to manage tasks, schedules, milestones, and resources worth tens-or-hundreds-of-millions of dollars. For them, effective project management means that project information must be available to them and to one or more external stakeholders. The current MS Project solution is not accessible by external partners making it difficult for staff to use. The sharing of MS Project files often results in duplications and data errors. The Office of the CIO has recently moved its PMO functions to ServiceNow (a Enterprise-wide SaaS solution). This migration, once completed, would enable the sharing of the project management functions with external partners easier. § ETR A1.11.
- 11. Customer Relationship Management & Case Management: Stakeholders have requested capabilities for managing agency operations through the use of ticketing, contact management, workflow, and assignment capabilities. They would like to leverage modern case management or CRM tools. Stakeholders see the tools we already have as expensive and/or the process to implement these tools as unclear and lengthy. In addition, the capabilities of these tools are not fully utilized because they cannot easily understand them. The office of the CIO in collaboration with Lab has initiated an agency-wide CRM tool selection effort. The requirements from a diverse group of stakeholders are collected and ranked and several leading CRM tools are being evaluated. The next step is to select the most appropriate solution and to implement an agency-wide tool to manage customer & stakeholder relationships, workflow and case management functionality. This effort will result in release of some of these functionalities to a limited number of stakeholders. § ETR A1.12.
- 12. **Business Process Reengineering:** Stakeholders are reporting that the current business processes are neither efficient nor effective. As a result, the IT systems developed on these processes are also ineffective, thereby resulting in production delays and driving up IT costs. We need to use Business Process Reengineering (BPR) techniques to rethink and redesign the way work is done to better support an USAID's mission and supporting processes, complemented by the use of modern technology. § ETR A1.13.
- 13. **Customer Service:** Stakeholders have expressed frustration with the delays in getting their IT systems approved due to the inadequate acquisition support they receive from the staff that are either unable or unwilling to assist them. This creates inefficiencies and/or additional expenses for stakeholders. They have attributed this to disjointed or poorly integrated processes along with inadequate institutionalization to the staff that support them. While the Office of the CIO has proactively sought to alleviate this issue by augmenting customer service intake and demand management process, tools and processes, there is room for further improvement. § ETR A1.14.
- 14. **Federal Regulations and Mandates:** There are a wide variety of federal regulations that require oversight and investment. Several examples of these regulations are: Technology Business Management (TBM); IT acquisitions (FITARA); IT security (FISMA); software asset management

- (MEGABYTE Act); cloud-based services (FedRAMP), federal data center consolidation (OMB-16-19), Foundations for Evidence-Based Policy-Making Act of 2018, the Federal Data Strategy (OMB M-19-18), guidelines from the National Institute of Standards and Technology (NIST) such as the NIST 800-53 Rev4/5, NIST 800-63-3 etc. While the USAID has generally implemented an effective compliance to these regulations and mandates, more work needs to be done in some areas⁶. The office of the CIO should also clearly deliberate to its internal stakeholders why some low-cost, high value IT services may not be allowed due to compliance requirements. § ETR A1.15.
- 15. **Data Governance:** USAID operating units continue to report needing comprehensive master data management to help them take advantage of USAID data and technology. Despite the establishment of the Data Administration and Technical Advisory (DATA) Board and the chartering of the Master Data Management Working Group under the DATA Board in 2020, many gaps remain in the implementation of Master Data Management at the Agency-level. Further, USAID operating units continue to express the need for the implementation of clear data management planning guidance at an Agency-level, to improve the management of data throughout the data lifecycle. § ETR 1.16.
- 16. Agency Personnel Management: USAID struggles to effectively manage all of its employees foreign service, civil service, foreign nationals, personal services contractors, and more. To add to this complexity, these employees frequently transfer between offices located in more than 80 countries worldwide. The Agency uses more than 30 IT systems to manage its people, with much of the data not being shared between those systems and not easily accessible to appropriate staff. Information can be inaccurate or out-of-date. Staff are not productive and are frustrated that a complex problem is made more confounding by their IT systems that lack integration at the data level and at the application level. In addition, USAID lacks a robust search and knowledge management capability. § ETR A1.17.
- 17. Funding Gaps/Underfunding: The increased demands for new and innovative IT services are often met with both Operational Expenditures (OE) and Development Modernization and Enhancement (DME) funding shortfalls. Investments in new technologies and solutions need to clearly detail their value proposition and, where possible, identify cost stabilization or savings that can be achieved through their implementation. Mounting pressure from Congress for USAID to keep its IT OE spending straight-lined at current levels leaves USAID little to no breathing room to transition new IT systems or services into production without corresponding offsets. Stakeholders indicate the need to reduce the cost of the current IT systems and services to assist in the development of new IT systems and services. Further, at its current straight-line levels, the Agency's annual Capital Investment Funding (CIF) is insufficient to meet the objectives of its IT Strategic Plan, satisfy Federal IT mandates, meet all Cybersecurity CAP goals, and take advantage of new innovations. § ETR A1.18.
- 18. Data Risk Management, Security and Privacy: USAID has adopted risk management, data security and privacy postures based on the agency's risk profile and risk appetite. This entails the review of existing USAID policies, procedures, processes, and technologies employed to manage risk within the Agency and to identify high-level risks to USAID as they relate to the mission and business objectives of the Agency. From these risks, a risk profile is determined based on organizational risk tolerances levels using both qualitative and quantitative metrics. Once completed, the data and analysis is used in the development of a Risk Management Plan (RMP). The agency's Enterprise Cyber Risk Management Plan addresses Risk Management Plan ensures

⁶ https://oig.usaid.gov/node/3771

- that we (a) Identify and document USAID risk tolerance for information and information services; and (b) Develop an implementable USAID/MCIO Risk Management Framework Guide. § ETR A1.19.
- 19. IT Workforce Development: USAID employs various IT professionals in the Office of the CIO and in its Missions around the world. Hence, some IT professionals (often foreign nationals) report to the Mission Executive Officers, not to the CIO. USAID needs to ensure technology related training and development to all staff (M/CIO and non-M/CIO). All IT professionals should have the technology literacy and skills they need to support a new generation of tools and applications being deployed by the office of the CIO. For example, all too often, Divisions know the number of direct hires they need and what aptitudes they need those immediate hires to have, yet this isn't amassed at the Bureau level. Singular M/CIO Division Chiefs have a good comprehension of the staff they need, yet this isn't officially recorded. In general, USAID has four major difficulties in effective Workforce Planning (WFP): (I) Understanding key mission goals and future objectives set by organization leadership and how the workforce needs to be aligned to achieve them. (2) The lack of formal demand planning coupled with rapidly evolving technology makes it difficult to aggregate the IT solutions and therefore to determine or forecast the capacity and skill sets required. (3) Constantly conduct a supply analysis that involves understanding the current workforce and how it is projected to change over time, due to attrition and other market trends. (4) Define the mechanisms and metrics used to monitor progress against the stated goals and how USAID translates knowledge about outcomes into future workforce-planning cycles. § ETR A1.20.
- 20. Artificial Intelligence: Artificial Intelligence (AI) promises considerable economic and societal benefits. In keeping with the White House Executive Order on Maintaining American Leadership in Artificial Intelligence (February 11, 2019). USAID needs to embrace and expand the use of AI by seeking potential usage in its mission. The office of the CIO must exploit this emerging technology in a manner consistent with the agency's values, policies, and priorities. Additionally, the office of the CIO needs to promote sustained investment in AI skill sets and its applicability at USAID, reduce barriers to the use of AI technologies in the USAID technical and business ecosystem, enhance internal and external partner access to high-quality and fully traceable USAID data, models, AI related source code and computing resources, use AI to conduct activities such as Data Risk Assessment, Data Classification and adopt AI standards and best practices as they emerge in the federal community. § ETR A1.21.
- 21. **Zero Trust Network:** Possible data breaches from outside and inside the USAID network are constant concerns in maintaining our cybersecurity posture. Zero trust (ZT) is the term for an evolving set of cybersecurity paradigms that move defenses from static, network-based perimeters to focus on users, assets, and resources ⁸. USAID is moving towards implementing a Zero Trust Network (ZTN) which is consistent with a Zero Trust Architecture (ZTA). ZTA is an enterprise cybersecurity architecture that is based on zero trust principles and designed to prevent data breaches and limit internal lateral movement. In a ZTA, devices and users are inherently untrusted. Access is denied until specifically defined controls are satisfied. ZTA is not a single technology solution, rather it is an interrelation of components that achieve the overall vision, and thus a paradigm shift from the individual tool or system of tools, to the entire IT Enterprise as a whole. USAID has established a roadmap and invested in many of the

⁷ IT Workforce Planning Playbook, 2020

⁸ SP 800-207, Zero Trust Architecture | CSRC

- foundational components required to implement a ZTA. However, to fully realize the ZT model, considerable integration and additional components will be needed. § ETR A1.22.
- 22. **Supply Chain Risk Management:** USAID needs to minimize the risk that our mission capability will not be impaired due to vulnerabilities in system design or sabotage or subversion of a system's mission critical functions or critical components. The application of supply chain risk management (SCRM) practices needs to begin prior to the acquisition of critical components or their integration within applicable systems, whether acquired through a commodity purchase, system acquisition, or sustainment process. USAID needs to institutionalize supply chain security across the enterprise, maintain integrity and access to key supporting SCRM data, partner with valid, reputable vendors who produce quality supplies and services. § ETR A1.23.
- 23. Data Strategy: USAID is fully in compliance with the Federal Data Strategy¹⁰. However, there are still a number of additional ways in which USAID could better facilitate the best use of data for evidence-based decision-making. To effectively use data for decision-making, USAID needs its data to be findable, accessible, interoperable, and reusable (FAIR). To make data easily findable both within the Agency as well as by the general public, it is critical that USAID maintain thorough metadata for all data assets and implement master data management. Further, USAID needs to improve its outward-facing platforms to facilitate the findability of open data from across the Agency by the general public. USAID also needs procedures in place to make it simpler to access Agency data, as part of making USAID data open by default. Even when USAID data are findable and accessible, they are often not interoperable. To promote interoperability, USAID needs both master data management as well as an enterprise-level platform that will allow Agency staff to securely access the data and tools they need in order to integrate disparate data. Finally, USAID needs data management planning and in general good data management throughout the data lifecycle, in order to generate truly reusable data. § ETR A1.24.
- 24. Workplace Innovation: Innovative organizations find novel solutions to tough problems. To be more innovative, USAID must create a fun and exciting workplace. One that is agile but provides adequate security. While people and processes play a large role in supporting workplace culture, emerging technology can help in making sure our workforce can complete its work in a timely manner, and without sacrificing the quality of the work and help users or enterprises automate a set of tasks previously only made possible by humans. In the "next normal," the workforce will be distributed, and application technical professionals responsible for collaboration and end-user technologies must adapt to deal with this changed and changing context. In 2020, COVID-19 rapidly forced the agency to adjust to remote working and this trend is expected to continue. It is increasingly clear that most organizations and workers have no plans to return to pre-pandemic office density. USAID will need to provide new and emerging technologies (virtual assistants, enhanced presence detection, augmented and virtual reality tools, workplace robots, health passports to gain access, social distancing technologies) to aid during and in a post COVID-19 world. § ETR A1.25.
- 25. **Hyperautomation**: USAID needs a defined strategy to scale business process automation and human task automation. Robotic Process Automation (RPA) uses software robots that mimic and integrate human actions within digital systems to optimize business processes. RPA automation captures data, runs applications, triggers responses, and communicates with other

⁹ Using DLA (Defense Logistics Agency) as guidance: https://www.dla.mil/Info/strategicplan/SupplyChainSecurityStrategy/

¹⁰ Federal Data Strategy

systems to perform a variety of tedious tasks. USAID intends to use Robotics Process Automation (RPA) as a tool to streamline existing and new business processes. While USAID has started utilizing RPA at an individual level, USAID needs to make this an enterprise level capability that can deliver end-to-end hyper-automation beyond RPA by combining complementary technologies. § ETR A1.26.

26. IoT new: USAID needs a defined strategy to utilize the capabilities of Internet of Things technology. The Internet of Things (IoT) describes the network of physical objects (things) that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. USAID intends to use IoT technology and the ability to connect everyday objects, embedded devices and sensors to the internet to enable seamless communication between people, processes, and things. By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyperconnected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world and they cooperate. The strategic importance of IoT and its use cases in healthcare, environmental monitoring, food security and other applications can produce immense value to USAID and its partners. § ETR A1.27.

6 Results Framework

OPERATIONS OBJECTIVES (OOs) (AXXA)

OPERATIONS OBJECTIVES (OOS)	Description
Technology Adoption	Increase user satisfaction and adoption of IT services.
Secure Operations Excellence	Improve operations and information security to ensure that the infrastructure supporting all services is reliable, efficient, and meets service level agreements.
Information	Improve access and presentation of information for USAID and its partners.
Innovation	Lead by innovation to provide Agency staff and its partners with state of the art capabilities in a timely fashion.

INTERMEDIATE RESULTS (IRs) (AXXA)

OPERATIONS OBJECTIVES (OOS)	Intermediate Results (IRs)
Technology Adoption	IR I: Deliver IT solutions, not just systems (AXXA)
	IR 2: Deliver business solutions on client's business schedules (AXXA)
	IR 3: Invest in cloud solutions that provide fast, inexpensive services (AXXA)
Secure Operations Excellence	IR 1: Network service delivery, performance, and reliability improved (AXXA)
	IR 2: Information Security Improved (AXXA)
	IR 3: IT costs are fully understood and communicated to business owners and consumers (AXXA) $$
Information	IR 1: Program Cycle Management Improved (AXXA)
	IR 2: Improved access to collaboration spaces for USAID staff and partners (AXXA)
	IR 3: Governance established for enterprise data (AXXA)
Innovation	IR 1: Provide state of the art solutions (AXXA)
	IR 2: Motivate M/CIO staff to be top producers (AXXA)

ILLUSTRATIVE ACTIVITIES (IAs) (AXXB)

As part of its strategic planning process, M/CIO creates an Enterprise Transition Roadmap (ETR). The Roadmap describes investments of time, money, and technology that address the challenges and gaps described in this strategic plan.

The Enterprise Transition Roadmap is further defined into broad groupings that the Office of the CIO uses to manage its work. These groupings are known as Segments and should be accompanied with Strategies and associated Reference Architectures. These groupings provide guidance and architectural templates that are used when IT solutions and services are being bought or built. The groupings are:

- I. Infrastructure
- 2. Security
- 3. Application
- 4. Data
- 5. Mobility

OPERATION OBJECTIVES (OOs)	Intermediate Results
Technology Adoption	IR I: Deliver IT solutions, not just systems (AXXB)
	Illustrative Activities:
	 Include costs for governance and support for enterprise IT systems Budget and manage for enterprise IT services, not just IT systems Create an easy-to-use service catalog Create partnerships with business owners Create service desks, centers of excellence
	IR 2: Deliver business solutions on client's business schedules (AXXB)
	Illustrative Activities:
	 Stand-up rapid development and hosting platforms Provide "developer ready" BPAs/IDIQs for bureaus/missions to buy into
	IR 3: Invest in cloud solutions that provide fast, inexpensive services $(A \times X B)$
	Illustrative Activities:
	 Develop a fast approval process for cloud solutions with little to no risk
Secure Operations Excellence	IR 1: Network service delivery, performance, and reliability improved (AXXB)
	Illustrative Activities:
	Enterprise Data CenterDisaster Recovery/COOP
	IR 2: Information Security Improved (AXXB)
	Illustrative Activities:
	All IT systems and services balance business value and risk
	IR 3: IT costs are fully understood and communicated to business owners and consumers (AXXB)
	Illustrative Activities:
	 All IT systems and services have costs based on their components, licensing, contracts and support

Information

IR I: Program Cycle Management Improved (AXXB)

Illustrative Activities:

- Build and launch DIS
- Improvements to enterprise reporting
 Build and launch Development Data Library

- Data integration Improve Enterprise search

IR 2: Improved access to collaboration spaces for USAID staff and partners $(\mathsf{A}\mathsf{X}\mathsf{X}\mathsf{B})$

Illustrative Activities:

Build and manage Partner portals and extranets

IR 3: Governance established for enterprise data (AXXB)

Illustrative Activities:

Create and manage a data governance board and community

Innovation

IR I: Provide state of the art solutions (AXXB)

Illustrative Activities:

- Inform M/CIO staff, system managers and program IT staff on new
- technologies
 Create and manage a "technology sandbox"

IR 2: Motivate M/CIO staff to be top producers (AXXB)

Illustrative Activities:

- Award new ideas
- Celebrate failures

ILLUSTRATIVE METRICS (BXXC)

OPERATIONAL OBJECTIVES (OOS)	INTERMEDIATE RESULTS (IRs) & METRICS
Technology Adoption	IR I: Deliver IT solutions, not just systems (BXXC)
	Metrics:
	% of staff expressing overall satisfaction with enterprise IT services
	IR 2: Deliver business solutions on client's business schedules (BXXC)
	Metrics:
	 % of staff reporting business solutions delivered on their business schedule
	IR 3: Invest in cloud solutions that provide fast, inexpensive services $(\mbox{\sf BXXC})$
	Metrics:
	 % of low-to-no-risk cloud solutions approved for limited use

Secure Operations Excellence

IR 1: Network service delivery, performance, and reliability improved

Metrics:

- % of SLAs met for infrastructure
- Cost and schedule variance

IR 2: Information Security Improved

Metrics:

- FISMA score improved
- Number of sensitive data leakages reduced

IR 3: IT costs are fully understood and communicated to business owners and consumérs

Metrics:

% of IT services with costs fully understood

Information

IR I: Program Cycle Management Improved

Metrics:

- Project cost and schedule variances
- % of staff and partners satisfied with Program Cycle information access and presentation

IR 2: Improved access to collaboration spaces for USAID staff and partners

Metrics:

- Project cost and schedule variances % of staff satisfied with USAID's collaboration services

IR 3: Governance established for enterprise data

Metrics:

Maturity ranking of USAID's enterprise data governance

Innovation

IR I: Provide state of the art solutions

Metrics:

- DME percentage of total IT budget Number of R&D activities completed

IR 2: Motivate M/CIO staff to be top producers

Metrics:

- **FEVS** scores
- Number of awards for new ideas Number of failures celebrated

7 **A**SSUMPTIONS

The following assumptions are outside of the control of the Office of the CIO and need to hold true in order to achieve the Office's objectives:

- Appropriate staffing levels and resources are available the Office of the CIO is supported by the Agency through the provision of appropriate staffing and funding. The continuity of staffing or funding patterns is not disrupted.
- Agency leadership and organizational structures are reliable stable and effective leadership to set priorities and to oversee the implementation of the activities under these objectives. The agency itself is not radically modified or merged with other institutions.
- 'External Drivers' mentioned earlier in the document can have unforeseen impact on an organization's strategy.
- Business stakeholders' IT solution needs will not change significantly from articulated needs.

8 GOALS IN RESULTS FRAMEWORK FORMAT

M/CIO: Deliver secure technology solutions and information management services to support the execution of USAID's mission in international development.

OO 1: Technology Adoption: Increase user satisfaction and adoption of IT services. OO 2: Secure Operational Excellence: Improve operations and information security to ensure that the infrastructure supporting all services is reliable, efficient, and meets service level agreements.

OO 3: Information: Improve access and presentation of information for USAID and its partners.

OO 4: Innovation: Lead by innovation to provide Agency staff and its partners with state of the art capabilities in a timely fashion.

Intermediate Results:

IR 1: Deliver IT solutions, not just systems

Illustrative Activities:

- Include costs for governance and support for enterprise IT systems
- Budget and manage for enterprise IT services, not just IT systems
- Create an easy-to-use service catalog
- Create partnerships with business owners
- Create service desks, centers of excellence

Metrics:

 % of staff expressing overall satisfaction with enterprise IT services

IR 2: Deliver business solutions on client's business schedules

Illustrative Activities:

- Stand-up rapid development and hosting platforms
- Provide "developer ready" BPAs/IDIQs for bureaus/missions to buy into

Metrics:

% of staff reporting

Intermediate Results:

IR 1: Network service delivery, performance, and reliability improved

Illustrative Activities:

- Enterprise Data Center
- Disaster Recovery/COOP

Metrics:

- % of SLAs met for infrastructure
- Cost and schedule variance

IR 2: Information Security Improved

Illustrative Activities:

 All IT systems and services balance business value and risk

Metrics:

- FISMA score improved
- Number of sensitive data leakages reduced

IR 3: IT costs are fully understood and communicated to business owners and consumers

Illustrative Activities:

 All IT systems and services have costs based on their components, licensing, contracts and support

Intermediate Results:

IR 1: Program Cycle Management Improved

Illustrative Activities:

- Build and launch DIS
- Improvements to enterprise reporting
- Build and launch Development Data Library
- Data integration
- Improve Enterprise search

Metrics:

- Project cost and schedule variances
- % of staff and partners satisfied with Program Cycle information access and presentation

IR 2: Improved access to collaboration spaces for USAID staff and partners

Illustrative Activities:

 Build and manage Partner portals and extranets

Metrics:

- Project cost and schedule variances
- % of staff satisfied with USAID's collaboration services

Intermediate Results:

IR 1: Provide state of the art solutions

Illustrative Activities:

- Inform M/CIO staff, system managers and program IT staff on new technologies
- Create and manage a "technology sandbox"

Metrics:

- DME percentage of total IT budget
- Number of R&D activities completed

IR 2: Motivate M/CIO staff to be top producers

Illustrative Activities:

- Award new ideas
- Celebrate failures

Metrics:

- FEVS scores
- Number of awards for new ideas
- Number of failures celebrated

business solutions delivered on their business schedule

IR 3: Invest in cloud solutions that provide fast, inexpensive services

Illustrative Activities:

 Develop a fast approval process for cloud solutions with little to no risk

Metrics:

 % of low-to-no-risk cloud solutions approved for limited use

Metrics:

• % of IT services with costs fully understood

IR 3: Governance established for enterprise data

Illustrative Activities:

 Create and manage a data governance board and community

Metrics:

 Maturity ranking of USAID's enterprise data governance

9 MANAGEMENT REQUIREMENTS

RESOURCES FOR ACHIEVING OBJECTIVES

The Office of the CIO has produced an Enterprise Transition Roadmap (ETR) that describes many of the management requirements for achieving the objectives in this strategic plan. The critical resources for achieving these objectives are:

- I. Capital and operational funds that support all of the IT Services and the objectives (milestones) in the Enterprise Transition Roadmap.
- 2. Staffing levels that are appropriate and skill sets that are based on these objectives and milestones.

GOVERNANCE AND MANAGEMENT PROCESSES

Structure of the Governance Boards (CXXA) (CXXB)

USAID's **Management Operations Council** (MOC)¹¹ and it's **IT Steering Subcommittee** (ITSS)¹² constitute the governance structure that oversees IT objectives and budgets.

The **MOC**, as the Agency's executive governance board for directing management reforms and improvement initiatives, is responsible for overseeing the re-engineering of business processes and major Agency IT initiatives. The MOC is responsible for reviewing the Agency's IT capital-investment proposals and for making recommendations to the Administrator based on the Administrator's management priorities and the USAID Transformation.

The **ITSS**, sponsored by the CIO, is responsible for providing executive guidance to the management and oversight of the Agency's IT resources, including providing input to the development of the Agency's IT strategies, evaluating and prioritizing the Agency's IT capital investments, and exercising executive oversight for the Agency's major IT programs. It monitors whether business objectives are being realized, whether investments are providing their intended returns, and if stakeholder expectations are being met.

While decision-making authority for IT investments rests with the MOC and the ITSS, some decisions are dependent on information from other sources as well. This means effective governance requires coordination with other existing or newly formed governance entities.

Budgeting and Investment Reviews (CXXA) (CXXB) (CXXC) (CXXD)

The governance process is closely aligned with the annual IT capital investment process. For IT capital investments, a Valuation Measurement Methodology (VMM) is used to ensure that newly proposed IT investments are evaluated and prioritized for funding, based on a set of standard decision criteria. VMM is aligned with USAID's mission and business objectives, and considers the costs, benefits, and risks associated with each proposed IT business case.

ADS Chapter 509, Management and Oversight of Agency Information Technology Resources.

¹² ADS Chapter 509, Management and Oversight of Agency Information Technology Resources.

With the implementation of FITARA, USAID's budget office partners with the CIO to review IT budgets from all Agency M/B/IOs. FITARA reporting requires agency CIO organizations to capture and report IT expenditures from across the entire agency, and not strictly what is budgeted at the central CIO level. CIO's Planning and Administration Division's budget branch (PAD/BCIP) performs an IT expenditure data collection effort with Agency B/IO/Ms to ensure that IT funded at the agency Bureau Program level is identified and reported in USAID's Annual IT Budget submission to OMB. Additionally, since OMB's implementation of the Technology Business Management (TBM) framework in 2018, IT investments must be broken down into their IT Tower and Cost Pool components in compliance with TBM reporting. The TBM cost taxonomy allows different IT investments to be analyzed and evaluated in terms of the specific burdens or requirements they place on varying technology infrastructure (storage, networks, data center, etc.), labor (internal or external), and other resource requirements (end user hardware and software). The Office of the CIO reviews funding requests for alignment with its business value, architecture, and priorities as described in this strategic plan, and in the ETR.

Chief Information Officer Roles and Responsibilities (DXXA)

The CIO has a direct reporting relationship to the Administrator at USAID. The CIO runs global IT infrastructure and provides more than 430 systems and services in support of international development assistance. The CIO partners with senior business leaders in the Agency, manages investments in accordance with OMB guidance, and leverages Enterprise Architecture to integrate business requirements.

Chief Information Security Officer Roles and Responsibilities (EXXA)

The CISO operates under the direction and supervision of the CIO and is the CIO's primary advisor concerning information security issues. The CISO is responsible for defining and evaluating the information security posture of the Agency's information and information systems and ensures agency compliance with FISMA and other federal mandates and requirements.

10 CHANGE MANAGEMENT

USAID operates in a constantly changing environment. USAID's IT environment is also constantly changing so that it can support stakeholder's needs. Change management helps everyone understand, accept, and embrace the changes that result from these new technologies.



How Continuous Improvement via our Change Management process increases our Efficiency and Effectiveness

The diagram highlights the steps taken by the Office of the CIO to manage change. The level of complexity and formality of change management depends on the nature of the change and on the stakeholders themselves.

Change management does not end once a new IT system or service is introduced. The Office of the CIO's change management plans cover all phases of its life-cycle, including post-rollout and institutionalization.

A strategic focus will be placed on the methods for supplying end-user training and obtaining user acceptance, along with involving key department stakeholders when implementing new technologies.