



Agency Priority Goal Action Plan

IT Modernization

Goal Leader:

Stuart McGuigan, Chief Information Officer, Department of State

Overview – Goal Statement

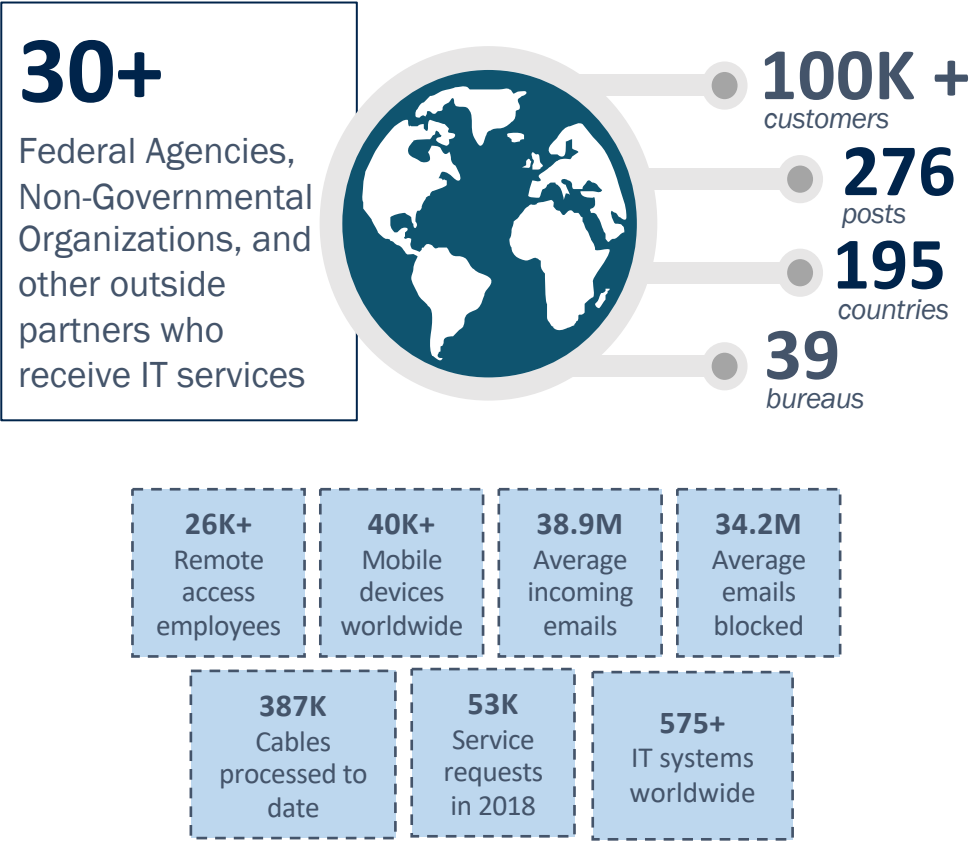
- Enhance the effectiveness of the Department's IT portfolio through increased productivity, usability, security, and transparency while ensuring that all IT services and solutions are aligned to the mission of the Department. By September 30, 2021, the Department will satisfy Field Enabling IT baseline levels for capability and performance at all field locations; modernize its suite of core, mission-aligned IT systems incorporating a Cloud Smart approach that enables the Department to share resources and measure efficiencies gained via common cloud platform environments; and achieve a continuous cyber risk diagnostics and monitoring capability that embeds security equities throughout the full lifecycle of all IT systems within every sponsored environment.

Overview – Challenges and Opportunities

Modernizing legacy systems while coordinating a diverse set of IT services to meet the needs of the Department’s global IT customers

The Department is addressing three primary opportunities to IT management

IT Services Worldwide



1. IT Modernization

- The Department needs to provide a consistent technology experience for its customers and effectively align IT modernization initiatives to enterprise standards, architecture, and technology roadmaps.

2. Data Quality

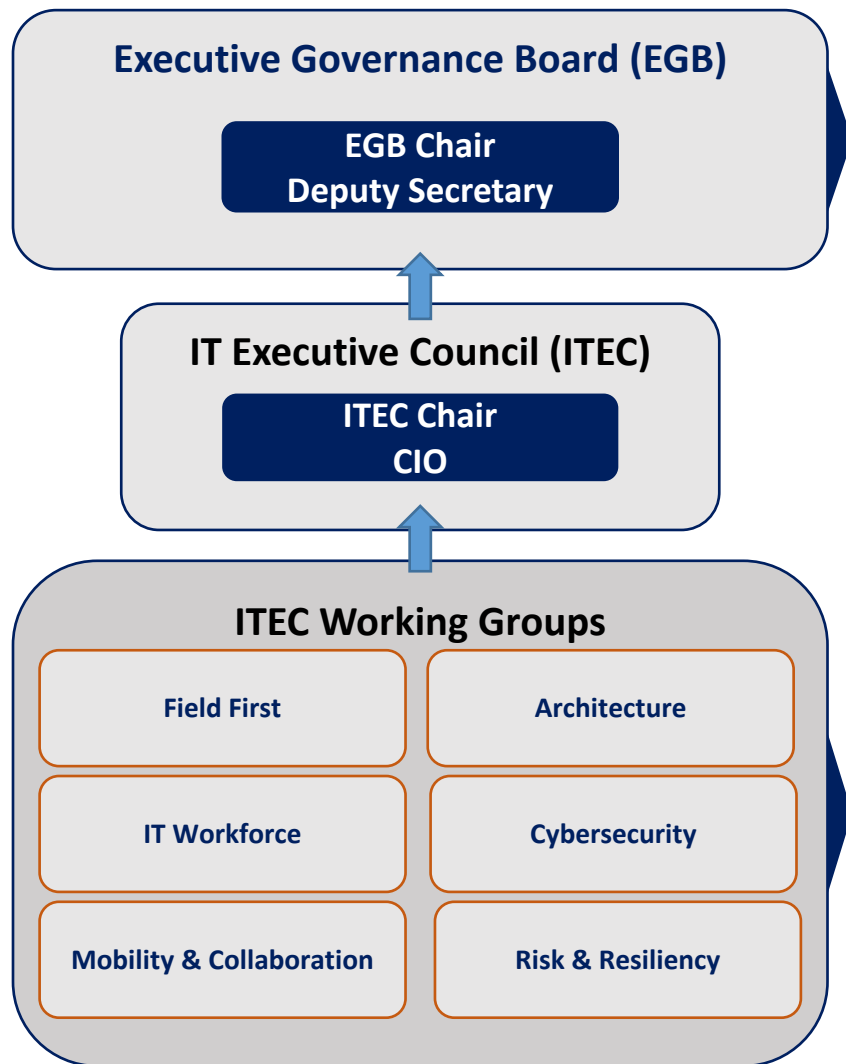
- The Department needs to improve the quality, completeness, and accuracy of data to realize the full benefit of data analytics and other advanced decision-making tools.

3. Cybersecurity

- The Department needs to improve its ability to address expanding cyberthreats in an ever-evolving technology landscape.

Leadership & Implementation Team

The IT Executive Council Provides Comprehensive Oversight and Addresses IT Challenges



Executive Governance Board (EGB)

- The EGB is a forum for senior leaders to discuss strategic issues and provide input into enterprise-level decisions on a regular basis
- Chaired by the Deputy Secretary or Undersecretary (U/S) for Management (M), it provides transparency, agility, and alignment of resources with priorities across the Department
- Established strategic management priorities (M High Five) to support the Secretary's vision
- Support IT programs to drive innovation, operational efficiency and cybersecurity

IT Executive Council (ITEC) and Working Groups

OVERVIEW:

- Established under authority of the Department's Chief Information Officer (CIO)
- Develops action plans to address IT challenges and gaps
- Develops solutions and opportunities for collaboration that impact IT decision-making
- Encompasses myriad of IT areas including IT planning, IT funding, architecture, cybersecurity, workforce strategy, and operations

GOALS:

- Aligns with Secretary's vision and diplomatic mission
- Improves IT decision-making and enterprise coordination
- Aligns to the M High Five

MEMBERSHIP:

- Cross-section of Department stakeholders/perspectives
- Agile focus on evolving needs

Management Priorities



Technology

– “Modernize with a mission-first, field-first focus”



Data & Analytics

– “Enable data-informed decision-making”



Excellence & Innovation

– “Optimize & continuously improve the customer experience”



Security & Infrastructure

– “Protect our people & assets”




Talent

– “Be the employer of choice & care for our people”

Goal Structure and Strategies

Goal: Enhance the effectiveness of the Department’s IT portfolio through increased productivity, usability, security, and transparency; ensuring that all IT services and solutions are aligned to the mission of the Department..



Secure, Modernized IT Infrastructure



Field First IT



IT Operational Excellence



Advanced Decision Support

Strategies

<ul style="list-style-type: none"> ✓ Strengthen and Streamline Cyber Operations ✓ Leverage the enterprise IDMS/ ICAM solution 	<ul style="list-style-type: none"> ✓ Modernize Post Infrastructure modernized to Support Smart Mission, WiFi, Mobility, and Cloud Computing 	<ul style="list-style-type: none"> ✓ Improve the quality, completeness, and accuracy of data and systems of record used to support IT investment prioritization and decision-making 	<ul style="list-style-type: none"> ✓ Implement an automated IT asset system of record ✓ AI/Predictive Modeling initiatives
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Key Indicators

<ul style="list-style-type: none"> ✓ Percentage of systems that leverage the enterprise IDMS/ICAM solution ✓ Percentage of FISMA reportable systems that have an ATO 	<ul style="list-style-type: none"> ✓ Percentage of Posts that have WiFi enabled to support SMART Mission 	<ul style="list-style-type: none"> ✓ Percentage of Bureau Executives that annually certify that their reported IT investments are accurate, strategically aligned, and meet privacy, cybersecurity framework, and incremental development requirements 	<ul style="list-style-type: none"> ✓ Percentage of network environments, with automated discovery, reporting IT assets to an Enterprise Configuration Management Data Base (CMDB) repository to support federal reporting requirements and advanced decision-making ✓ Develop and pilot AI/Predictive Modeling initiatives.
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Summary of Progress – Q4 FY20

- Major accomplishments for Q4 include:



- ✓ The Department improved the system authorization posture of high and moderate impact systems in FY 2020. As of the end of Q4, 35 of 41 (85 percent) high impact systems and 167 of 269 (62 percent) moderate impact systems were authorized. This is an increase from 80 percent and 60 percent in Q3.
- ✓ The Department awarded two new task orders for Assessment & Authorization with the primary objective to eliminate the backlog of unauthorized systems. The task order awardees will work closely with the Bureaus and System Owners to develop a comprehensive master schedule including timelines, deliverables, and corresponding responsible parties in order to obtain ATOs for expired, unauthorized, and expiring systems in FY 2021.
- ✓ The IDMS/ICAM project incorporated five new cloud environments and remains ahead of schedule with 15 of 20 environments.
- ✓ The AI/Predictive modeling program made significant progress in FY 2020 including introducing AI tools into a treaty search system. Additionally, Diplomatic Security (DS) is developing a new security clearance processing application, leveraging the AI tool UiPath Attended Robot.
- ✓ The AI/Predictive modeling program is also working with Amazon on a machine learning project to increase employee retention and is developing an automated chatbot for the Enterprise Help Desk with enhanced natural language interface.

Key Milestones

Secure, Modernized IT Infrastructure			
Key Milestone	Due Date	Status	Comments
Implement IDMS/ICAM on 2 cloud platforms/applications	Q1 FY20	Completed	<ul style="list-style-type: none"> Successfully deployed Cloud iDaaS component of the State Enterprise Identity, Credential and Access Management solution within the FAN
Implement IDMS/ICAM on 3 cloud platforms/applications	Q2 FY20	Completed	<ul style="list-style-type: none"> Successfully deployed Cloud iDaaS component of the State Enterprise Identity, Credential and Access Management solution with WebEx and myData
Accelerate processing of ATO declarations for the Department's IT systems risk profiles (high, moderate, low)	Q3 FY20	On Track	<ul style="list-style-type: none"> Accelerated processing of ATO declarations for the Department's IT systems rated with a low security risk profile Currently reviewing the process for completing the registration and self-assessment of the low impact systems in the Xacta GRC tool
Implement IDMS/ICAM on 5 more cloud platforms/applications for a total of 10	Q4 FY20	On Track	<ul style="list-style-type: none"> Exceeded the Agency Priority Goal of 50% of 20 target application platforms connected by the end of Q4 2020 by five. Implemented five new IDMS/ICAM environments to include: Citrix GW, Salesforce CRM, Amazon APPSTREAM, GO Merit Based Compensation, Blackberry Cloud – SAFE
Implement IDMS/ICAM on 3 cloud platforms/applications	Q1 FY21	On Track	
Implement IDMS/ICAM on 3 cloud platforms/applications	Q2 FY21	On Track	
Implement IDMS/ICAM on 4 additional cloud platforms/applications for a total of 20 across the enterprise	Q3 FY21	On Track	<ul style="list-style-type: none"> Successful completion depends in large on legacy systems migrating to Cloud-based solutions
All FISMA reportable systems have current Authority To Operate (ATO)	Q4 FY21	On Track	<ul style="list-style-type: none"> New systems are introduced periodically, and legacy system are phased out, impacting the backlog and percentage of ATOs

Key Milestones

Field First IT			
Key Milestone	Due Date	Status	Comments
Upgrade infrastructure at 10 posts to support WiFi, mobility, and cloud	Q1 FY20	Completed	
Upgrade infrastructure at 20 posts to support WiFi, mobility, and cloud	Q2 FY20	Completed	
Implement overseas focused SMART Mission based on user demand and requirements	Q3 FY20	Delayed	<ul style="list-style-type: none"> Overseas Enabling Baseline Technology project initiated to define minimum standard of IT infrastructure and capabilities at each Post Completed Initial Post Technology Baseline and Gap Analysis COVID travel restrictions have significantly delayed this effort
Upgrade infrastructure at 20 posts to support WiFi, mobility, and cloud	Q3 FY20	Delayed	<ul style="list-style-type: none"> Q3 WiFi deployments were suspended due to global COVID travel restrictions The Department will revisit all future WiFi deployment targets once the COVID travel restrictions are lifted
Upgrade infrastructure at 30 posts to support WiFi, mobility, and cloud	Q4 FY20	Delayed	<ul style="list-style-type: none"> Q4 WiFi deployments were suspended due to global COVID travel restrictions The Department will revisit all future WiFi deployment targets once the COVID travel restrictions are lifted
Upgrade infrastructure at 5 posts to support WiFi, mobility, and cloud	Q1 FY21	On Track	<ul style="list-style-type: none"> Deployment target adjusted due to COVID-19 lockdown impact.
Upgrade infrastructure at 5 posts to support WiFi, mobility, and cloud	Q2 FY21	On Track	<ul style="list-style-type: none"> Deployment target adjusted due to COVID-19 lockdown impact.
Upgrade infrastructure at 10 posts to support WiFi, mobility, and cloud	Q3 FY21	On Track	<ul style="list-style-type: none"> Deployment target adjusted due to COVID-19 lockdown impact.
Upgrade infrastructure at 10 Posts for a total of 30 Posts' upgraded to support WiFi, mobility, and cloud	Q4 FY21	On Track	<ul style="list-style-type: none"> Successful completion depends on lifting of travel restrictions.

Key Milestones

IT Operational Excellence			
Key Milestone	Due Date	Status	Comments
IT Executive Council (ITEC) established and co-created with participating bureaus	Q1 FY20	Completed	<ul style="list-style-type: none"> Governance structure for CIO to oversee all Department IT
All Department IT CPIC investment are certified to be accurate by the Bureau's executive	Q4 FY20	On Track	<ul style="list-style-type: none"> All Bureau Executives in the Department have certified some level of accuracy and completeness of data reported on IT investments, but only 42 percent of executives actively certified their respective investment's reporting ahead of the agency FY 2022 request submitted to the Office of Management and Budget in August 2020. The Department is working to improve executive involvement in certifying accurate IT investment data during the planning and budget process and is conducting targeted follow-up reviews between the CIO and Agency Budget Director organizations and select bureaus in Q1 of FY 2021.
Draft Key IT service delivery processes	Q1 FY21	On Track	
Create Agile mission plan for Department IT service providers to address backlog of user IT needs	Q2 FY21	On Track	
Create End-to-End Metrics for all IT Business Processes	Q4 FY21	On Track	

Key Milestones

Advanced Decision Support			
Key Milestone	Due Date	Status	Comments
Begin Robotic Process Automation (RPA) piloting effort	Q2 FY20	Completed	<ul style="list-style-type: none"> Launched Robotic Process Automation (RPA) and Hyper Automation efforts, including evaluating, testing, implementing prototypes that leverage third-party products and platform level AI tools
Stand up RPA training environment and begin obtaining an enterprise license	Q3 FY20	Delayed	<ul style="list-style-type: none"> The standup of the training environment is 75 percent complete The elements of the RPA training environment include installation and testing of the license server, production and operational testing of robots, and installation of the Studio development tool Training documents have been prepared, and classes have been held for selected Department offices and employees Enterprise license requirements gathering initiated
Submit ATO for Robotic Process Automation. Create training and provisioning processes for RPA	Q4 FY20	On Track	<ul style="list-style-type: none"> Created approved ITCCB entries for the UiPath Studio, Robot, and Orchestrator products. Diplomatic Security (DS) is developing a new clearance processing application based on the UiPath Attended Robot. Partnering with Amazon on a machine learning project to improve employee retention. Working on a chatbot for the help desk. Developing analytics and UiPath RPA integration to enhance the natural language interface.

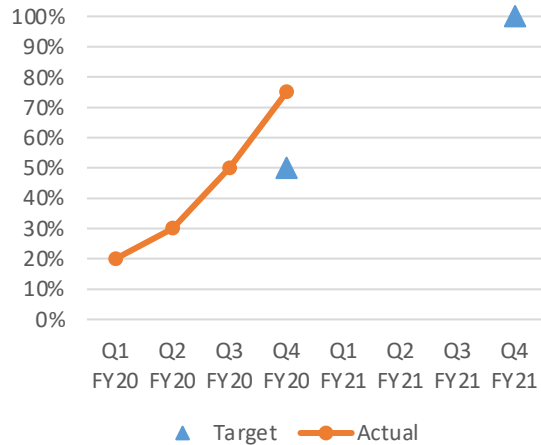
Key Milestones

Advanced Decision Support			
Key Milestone	Due Date	Status	Comments
Submit ATO package for Google Artificial Intelligence tools and work with early adopters to enhance capabilities	Q1 FY21	On Track	
Implement an automated IT Asset System of Record	Q2 FY21	On Track	<ul style="list-style-type: none">Established a CMDB priority project
Submit ATO for Amazon and Microsoft AI Cloud AI tools and create user guides and training materials	Q3 FY21	On Track	
Continue to identify requirements for advancing AI use in the Department. FSI develops training programs.	Q4 FY21	On Track	

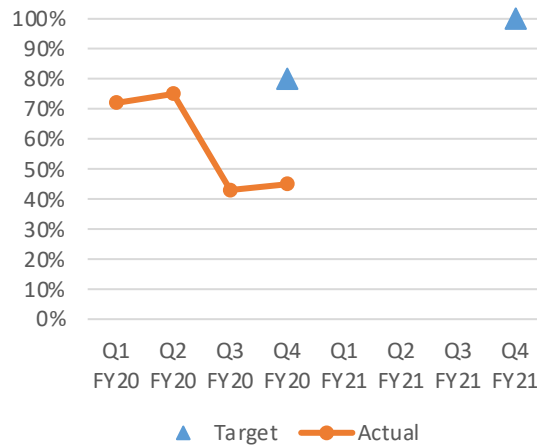
Key Indicators

Indicator	Current Baseline	FY 2020 Target	FY 2021 Target
Secure, Modernized IT Infrastructure			
Percentage of systems that leverage the enterprise IDMS/ICAM solution <i>(Reporting period planning target is 20 systems)</i>	75%	50%	100%
Percentage of FISMA reportable systems that have an ATO <i>(Represents one of OMB's CAP Goals reported through FISMA/FITARA)</i>	45%	80%	100%
Field First IT			
Percentage of Posts that have WiFi enabled to support SMART Mission <i>(Reporting period target is 130 posts out of total of 280 posts worldwide)</i>	16%	22%	47%
IT Operational Excellence			
Percentage of Bureau Executives that annually certify that their reported IT investments are accurate, strategically aligned, and meet privacy, cybersecurity framework, and incremental development requirements <i>(Reporting period target is all bureaus with IT budgetary resources – must be recertified each year)</i>	100%	100%	100%
Advanced Decision Support			
Percentage of network environments, with automated discovery, reporting IT assets to an Enterprise Configuration Management Data Base (CMDB) repository to support federal reporting requirements and advanced decision-making <i>(Reporting period target is nine network environments)</i>	39%	40%	100%
Develop and pilot AI/Predictive Modeling initiatives <i>(Reporting period target is 10 pilots or solutions)</i>	30%	50%	100%

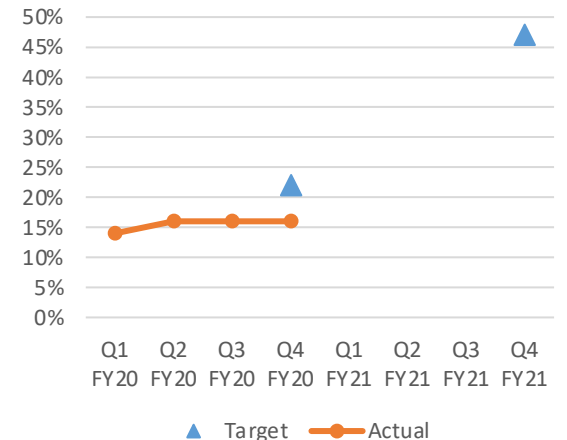
Key Indicators



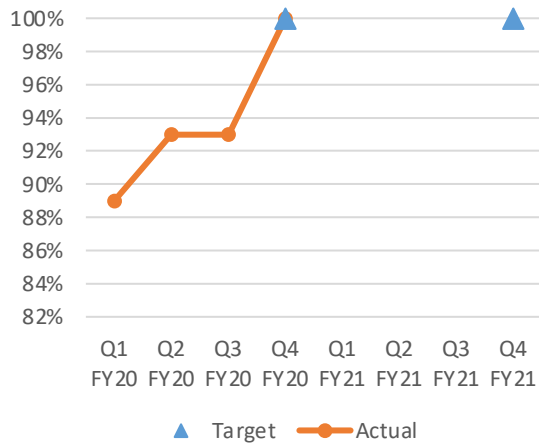
Percentage of systems that leverage the enterprise IDMS/ICAM solution



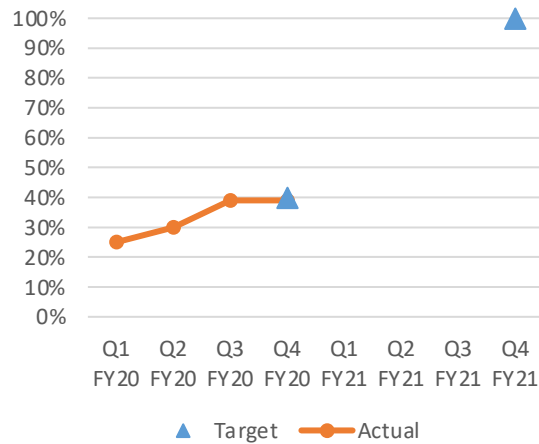
Percentage of FISMA reportable systems that have an ATO (see comment on slide 6)



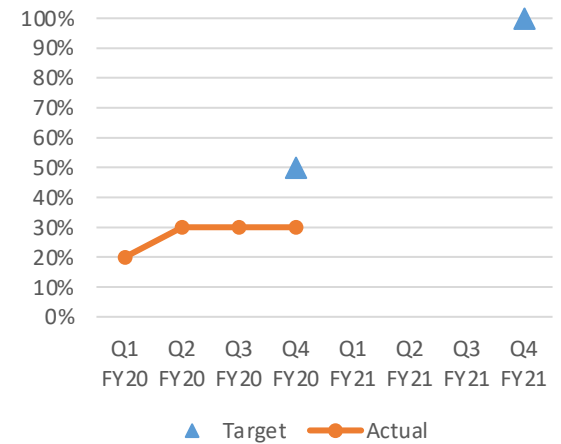
Percentage of posts that have WiFi enabled to support SMART Mission



Percentage of Bureau Executives that annually certify that their reported IT investments are accurate, strategically aligned, and meet privacy, cybersecurity framework, and incremental development requirements



Percentage of network environments, with automated discovery, reporting IT assets to an Enterprise Configuration Management Data Base (CMDB) repository to support federal reporting requirements and advanced decision-making



Develop and pilot AI/Predictive Modeling initiatives

Data Accuracy and Reliability

Data Source	Accuracy	Reliability	Notes
<u>Goal: Secure, Modernized IT Infrastructure</u>			
• iMatrix	Mod	High	Process improvement will improve level of accuracy
• FISMA	Mod	High	DHS quarterly Cybersecurity Risk Management Assessment report
• CMDB	N/A	N/A	Implementation Initiative underway
• Xacta	High	Mod	New systems captured - retroactive entry of existing data on-going
• Baseline Enabling IT Dashboard	Mod	Mod	Implementation and refinement of dashboard and status on-going
<u>Goal: Field First IT</u>			
• Baseline Enabling IT Dashboard	Mod	Mod	Implementation and refinement of dashboard and status on-going
• iMatrix	Mod	High	Process improvement will improve level of accuracy
• Sybermetrics	High	Mod	Aggregates ticket and performance data from multiple sources
<u>Goal: IT Operational Excellence</u>			
• Baseline Enabling IT Dashboard	Mod	Mod	Implementation and Refinement of dashboard and status on-going
• iMatrix	Mod	High	Process improvement will improve level of accuracy
• Sybermetrics	High	Mod	Aggregates ticket and performance data from multiple sources
<u>Goal: Advanced Decision Support</u>			
• iMatrix	Mod	High	Process improvement will improve level of accuracy
• Center for Analytics (CfA)	TBD	TBD	Working with MSS Office on integrating disparate source data with CfA
• Apptio	N/A	N/A	Initiated pilot for generating TBM presentation of portfolio data

Additional Information

Contributing Programs

Organizations:

- Bureau of Information Resource Management (IRM); IT Executive Council (IT Leadership Stakeholders across the Department of State)

Program Goals:

- (1) Secure, Modernized IT Infrastructure, (2) Field First IT, (3) IT Operational Excellence, and (4) Advanced Decision Support

Regulations:

- E-Government Act (eGov), Federal IT Acquisition Reform Act (FITARA), Clinger-Cohen Act (CCA), Modernizing Government Technology Act (MGT), Federal Information Security Management Act (FISMA), Executive Order (EO) 13800: *Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure*, Report to the President on Federal IT Modernization

Policies:

- 1 FAM 270, 5 FAM, 12 FAM 600

Other Federal Activities:

- President's Management Agenda (PMA), Foreign Affairs Cloud Environment Technology (FACET), Foreign Affairs Network (FAN), Strategic Sourcing, Enterprise Mobile Management (EMM) Modernization

Stakeholder / Congressional Consultations

IRM regularly meets with OMB's eGov office reporting on these and other IT modernization initiatives and upon request briefs Senate and House committees.