5 FAM 670 INFORMATION TECHNOLOGY (IT) PERFORMANCE MEASURES FOR PROJECT MANAGEMENT

(CT:IM-92; 08-01-2007) (Office of Origin: IRM/BPC/PRG)

5 FAM 671 WHAT ARE IT PERFORMANCE MEASURES AND WHY ARE THEY REQUIRED?

(CT:IM-74; 05-03-2006)

- a. Performance measures are benchmarks for evaluating how IT investments can be more efficient, effective, and obtain better results to support an organization's mission, goals, and objectives. Measurement is vital in determining what a project is accomplishing and whether the results are being achieved.
- b. The Government Performance Results Act (GPRA) requires the Department to establish performance plans with performance goals. These goals should define the level of performance to be achieved by a program activity and the need to express these goals in an objective, quantifiable, and measurable form. Office of Management and Budget (OMB) Circular A-130 mandates agencies use performance measures to ensure that IT investments are managed efficiently and effectively.
- c. IT metrics must be aligned with the Department's strategic goals and mission as outlined in the Joint State/USAID Strategic Plan and the performance criteria specified in the Joint Performance Plan (see 5 FAM 130).
- d. Department of State entities must establish performance measures that monitor and compare actual performance to planned results as stated in the Department of State IT Strategic Plan (see 5 FAM 130).

5 FAM 672 SCOPE OF THIS POLICY

(CT:IM-74; 05-03-2006)

a. This subchapter applies to program and project managers in all Department of State entities both domestic and abroad, and is the official policy for measuring IT performance. It also introduces the Performance Reference Model (PRM) mandated by OMB.

b. This policy is designed to enhance managers' understanding of information technology performance measures (see 5 FAM 678.4).

5 FAM 673 AUTHORITIES FOR THIS POLICY

(CT:IM-74; 05-03-2006)

The authorities for this policy are covered in 5 FAM 113.

5 FAM 674 APPLICABLE DEFINITIONS

(CT:IM-74; 05-03-2006)

Baseline – A starting point or initial value for a program or project measurement indicator.

Business Case – A clear and concise justification describing what the program or project entails, why the product or service is necessary, how much it will cost, what risks are involved, how work and progress will be tracked and measured, and the timeframe for completion.

Business Reference Model (BRM) – A framework that facilitates a functional (rather than organizational) view of the federal government's lines of business, including its internal operations and its services for citizens.

Capital Planning and Investment Control (CPIC) – A decision-making process, directed by the Department's E-Government Program Board (E-GovPB), for ensuring that information technology investments integrate strategic planning, budgeting, procurement, and the management of IT in support of the Department's mission and business needs.

Customer Results Measurement Area – The part of the PRM that captures how well an enterprise-wide or specific process within the Department is serving its customers, and ultimately citizens.

Electronic Government Program Board (E-GovPB) – An advisory entity to the Under Secretary for Management that addresses the full range of Department E-Government and IT investment portfolio and project management activities.

Electronic Government Program Management Office (E-Gov PMO) – The office that ensures the completion of all program elements related to the Department's IT investments for meeting E-Government guidance and ensure that major milestones are met throughout all stages of the CPIC process.

Enterprise Architecture – The practice of applying a comprehensive and rigorous method for describing a current or future structure for an

organization's processes, data, information systems, technology, and organizational sub-units, so that they align with the organization's core goals and strategic direction. Although often associated strictly with information technology, it relates more broadly to the practice of business optimization in that it addresses business architecture, performance management, and process architecture as well.

Enterprise Architecture Line of Sight Diagram – A diagram for each IT initiative that brings together all of the components of the Federal Enterprise Architecture Models (e.g., BRM, PRM, etc.) onto a single graphic illustration that reflects how value is created as inputs (e.g., technology) are used to create outputs via the business processes and activities, which in turn, impact outcomes (i.e., mission, business and customer results).

Goals – A concise and measurable description of one or more related actions that are necessary to attain a tangible milestone toward the achievement of an objective.

Human Capital Measurement Area – An area of the PRM that captures the human capital aspects of performance.

Inputs – The type and amount of resources that are required and used to deliver a government service.

Information Technology Performance Measurement – The indication of what a program or project is accomplishing and whether results are being achieved while supporting business processes and strategic program and project outcomes.

Information Technology Investment – A capital IT asset acquired through the acquisition process that must be managed throughout its lifecycle.

Lines of Business – Descriptions of the services and products the Government provides to its stakeholders.

Line of Sight – A concept that clearly articulates the cause-and-effect relationship between inputs, outputs, and outcomes.

Measurement Areas – Performance areas that identify the highest level of the Federal Enterprise Architecture (EA) Performance Reference Model (PRM) framework and capture aspects of performance at the input, output, and outcomes levels.

Measurement Categories – Groups within each measurement area of the PRM that describe at a high level an attribute or characteristic to be measured.

Measurement Grouping – Subgroups within each measurement category of the PRM that describe specific types of measurement indicators.

Measurement Indicators – Specific measures developed by a program

sponsor, program, or project manager used to track, assess, and report the success or failure for a specific BRM line of business or subfunction, Department, program, or project initiative.

Mission and Business Results Measurement Area – A measurement area within the PRM and major component of the "line of sight" that illustrates the outputs or desired results the Department seeks to achieve.

Objective – A description of a strategic position to be attained or a purpose to be achieved that is tangible and attainable.

OMB Exhibit 300 – A comprehensive questionnaire designed for major IT investments that is required annually by OMB to justify funding and summarize the investment's business case, describes what the program or project entails, why the product or service is necessary, how much it will cost, what risks are involved, how work and progress will be tracked and measured, and the timeframe for completion.

Operationalized Performance Indicators – Clearly defined specific, measurable, attainable, realistic, and time-associated metrics used to track progress and determine the effectiveness and efficiency of IT initiatives.

Other Fixed Assets Measurement Area – An area of the PRM that captures the performance of other assets such as vehicle fleets, facilities, and other equipment.

Outcomes – The end result of government action, aggregated across multiple agencies and levels of government.

Outputs – The amount of "work" accomplished; discrete products, services, or information that pass from the IT program to the customer (business unit or citizen).

Performance Indicators – Characteristics or properties of resources, processes, customers, or desired results that the Department uses to measure progress toward projected annual performance goals and strategic objectives and goals. Indicators are drawn primarily from bureaus and mission performance plans but may come from day-to-day operations.

Performance Metrics – A set of standard measures used to identify and evaluate how well specified characteristics or properties of resources, processes, customers, or desired results change over time when compared against a baseline value.

Performance Reference Model (PRM) – A standardized measurement framework designed to measure the performance of IT investments and their contribution to program performance.

Processes and Activities Measurement Area – The area that creates the outputs directly resulting from the process an IT initiative supports.

Program - A group of planned projects having a common goal, objective, or

mission with a defined budget, management structure, dedicated resources, and does not have a specified start and end date.

Project – A planned task or undertaking that has been scheduled to achieve a desired result within defined budget and time constraints; a planned effort with a performance goal, scheduled start and end dates.

Technology Measurement Area – The area that captures key elements of performance directly relating to the IT initiative.

5 FAM 675 WHAT ARE THE ROLES AND RESPONSIBILITIES FOR MEASURING IT PERFORMANCE?

(CT:IM-74; 05-03-2006)

The following roles and responsibilities are vital to ensuring that IT performance measures are developed and implemented domestically and abroad to ensure that the necessary metrics and performance indicators are appropriate for accomplishing the stated goals and objectives. Other responsible organizations are in 5 FAM 115.

5 FAM 675.1 Program Sponsors of IT Initiatives

(CT:IM-74; 05-03-2006)

Program sponsors within a program or administrative area for an IT initiative, translate process and business goals into system requirements and coordinate their implementation. They are responsible for linking organization and IT performance. The Project Sponsor should be a senior individual with requisite management, technical, and business skills to lead the investment or supervise a designated Project Manager. Commitment by the Project Sponsor to the Department's CPIC process represents accountability for the investment.

5 FAM 675.2 Business Owner

(CT:IM-74; 05-03-2006)

The Business Owner manages the development, modification, and enhancement of a program for a specific business area. The business owner, who may also be the process owner, identifies and defines the program objectives and goals, process objectives and goals, the business outcomes, and results to be achieved. The business owner is responsible for identifying, defining, and specifying the organizational performance metrics. The business owner is also responsible for capturing or measuring some

program performance data, consolidating all performance data captured and measured by program and project, and then evaluating the results of the overall program's performance. Evaluation of the program performance data may require the business owner to make adjustments to the program plan, schedule, activities, or level of resources planned for and utilized. Changes made by the business owner may require changes in associated projects.

5 FAM 675.3 IT Program/Project Managers

(CT:IM-74; 05-03-2006)

Program and project managers are responsible for: developing, modifying, or enhancing IT investments; understanding the users' mission and critical success factors (i.e., those activities and results that must be realized if the users are to accomplish their mission); managing the cost and schedule of the project; and measuring and reporting the quality of the system as part of the CPIC process.

5 FAM 675.4 Enterprise Architects

(CT:IM-74; 05-03-2006)

Enterprise architects review the performance linkages and measurement indicators—developed and categorized by the program sponsor and program/project managers—for conformance to OMB guidance and directives and alignment with the Joint Strategic Plan, Joint Performance Plan, or Bureau Performance Plans. Any discrepancies or misalignments identified by the enterprise architects are resolved via discussions with the program sponsor and program/project managers. The enterprise architects are also responsible for vetting the "line of sight" with the program sponsors and program/project managers. "Line of sight" diagrams are created for each program (and in some instances, specific projects and IT investments) by the enterprise architects based on these discussions.

5 FAM 675.5 E-Government Program Management Office (E-Gov PMO)

(CT:IM-74; 05-03-2006)

The E-Gov PMO was established by the Under Secretary for Management to support the E-GovPB and to provide a single source to coordinate and ensure completion of all program elements related to Department E-Gov/IT projects. The E-Gov PMO manages the Department's CPIC process, including the selection, control, and evaluation of IT investments to ensure compliance with OMB guidelines for establishing, monitoring, and achieving performance measures for all IT investments. (See 5 FAM 115.3-2).

5 FAM 675.6 E-Government Program Board (E-GovPB)

(CT:IM-74; 05-03-2006)

The E-GovPB is the upper-level advisory entity to the Under Secretary for Management that: addresses the full range of Department E-Gov and IT investment portfolio and project management activities; ensures the completion of all program elements related to the Department's IT investments for meeting E-Government initiatives, and ensures that major milestones are met throughout all stages of the CPIC process.

5 FAM 675.7 Deputy CIO for Business, Planning, and Customer Service and Chief Knowledge Officer (IRM/BPC)

(CT:IM-74; 05-03-2006)

The IRM/BPC is responsible for the approval of all information technology (IT) policy and procedures and their codification in the Foreign Affairs Manual (FAM). Performance measures policy falls within this category.

5 FAM 675.8 Chief Financial Officer (CFO)

(CT:IM-74; 05-03-2006)

The CFO ensures the development and maintenance of integrated accounting and sound financial management systems that include systematic measurement information in agency performance (see 5 FAM 115.5).

5 FAM 675.9 Chief Information Officer (CIO)

(CT:IM-74; 05-03-2006)

The CIO is responsible for monitoring and evaluating the performance of IT programs in accordance with applicable laws, regulations and other directives, including the President's Management Agenda (PMA), E-Government initiatives, and Office of Management and Budget (OMB) mandates for accomplishment and accountability (see 40 U.S.C. 1425(c)).

5 FAM 675.10 Chief Information Security Officer (CISO)

(CT:IM-74; 05-03-2006)

The CISO carries out the CIO's security responsibilities of developing and maintaining an agency-wide information security program (see 44 U.S.C.

3544(a)(3)(B)).

5 FAM 676 WHY IS SECURITY IMPORTANT IN MEASURING IT PERFORMANCE?

(CT:IM-74; 05-03-2006)

- a. In addition to GPRA, the Federal Information Security Management Act (FISMA) directs agencies to perform annual independent evaluations of information security programs (see 44 U.S.C. 3545). Bureau executives, program managers, and system owners are required to identify, track, and correct existing security deficiencies and implement processes that guard against anticipated or identified threats and vulnerabilities.
- b. OMB requires the Department to respond to OMB's reporting requirements for information security performance measures, which indicate how information and information systems are protected. OMB also tracks budget submissions and links them with the Department's overall information security performance. The measurement used to evaluate program performance and legislative compliance is critical to the Department's ability to acquire and maintain adequate funding for capital planning (see 5 FAM 677.2).
- c. The Chief Information Security Officer (CISO) is responsible for responding to OMB reporting requirements in the area of information security and its overall performance.

5 FAM 677 WHAT IS THE ROLE OF ENTERPRISE ARCHITECTURE (EA) IN IT PERFORMANCE MEASURES?

(CT:IM-74; 05-03-2006)

- a. The Office of Enterprise Architecture (IRM/BPC/EAP/EA) has developed a roadmap that identifies how State and USAID must transition from how we operate today to how we want to operate in the future, to ensure that the Department's business needs and mission are continuously met. Progress toward these objectives must be tracked and reported, at the enterprise architecture level, through a set of migration and transition plans that specify the target performance metrics; and at the program level, through the periodic one-on-one reviews of program performance metrics with the responsible program sponsor, program manager, and project manager.
- b. All IT investments must align with the strategic objectives and goals

stated in the Joint Strategic Plan, performance goals cited in the Joint Performance Plan or Bureau Performance Plan, and measurement categories and groupings in the performance reference model (PRM), and the appropriate business areas, lines of business, and sub-functions in the Joint Business Reference Model (BRM). (See E-Gov PMO Web site for links to PRM and BRM.)

- c. Managers must use the Federal Enterprise Architecture Reference Models to view their approach to programs and projects as follows:
 - (1) Establish the line of sight;
 - (2) Use the PRM to determine operationalized measurement indicators; and
 - (3) Identify reusable operationalized measurement indicators that support the appropriate measurement areas. (See E-Gov PMO, PRM model.)

5 FAM 677.1 What Is the Purpose of the Federal Enterprise Architecture Performance Reference Model?

(CT:IM-74; 05-03-2006)

- a. OMB created the Performance Reference Model (PRM) as part of their Federal Enterprise Architecture (FEA) framework. The PRM presents the links between the inputs (i.e., technology, human capital, physical assets), and the internal business processes and activities necessary to achieve desired business results and customer-centric outcomes. (See E-Gov PMO.)
- b. The PRM was developed to determine performance measurement indicators for IT initiatives. The Department must use the agency specific version of the PRM to assist in establishing performance measurement indicators for IT projects. The Department must also use the PRM to:
 - (1) Categorize the measurement baselines and planned improvements identified by the program sponsor and project manager;
 - (2) Use the Joint Business Reference Model (BRM) to identify the lines of business and subfunctions that the program/initiative is supporting; and,
 - (3) Identify which strategic objectives and goals from the Joint Strategic Plan, Joint Performance Plan, or Bureau Performance Plan must be accomplished.
- c. Organizations must use the Federal Enterprise Architecture Performance Reference Model (FEA PRM) as a guide to classify and produce

performance measures for all investments.

5 FAM 677.2 How Does Performance Measurement Relate to the Capital Planning Investment and Control (CPIC) Process and Enterprise Architecture (EA)?

(CT:IM-74; 05-03-2006)

- a. The CPIC process is a systematic, standardized set of procedures for selecting IT investments to fund, and subsequently manage, their risks and returns. It is a continuous, integrated, management process focused on achieving desired business outcomes and provides a mechanism for the continuous selection, control, and evaluation of IT projects. The CPIC process consists of three phases:
 - (1) The "Select" phase ensures that IT initiatives are chosen that best support the Department's mission and strategic goals. The Select phase consists of two components: the pre-select and the select components. The "pre-select" component requires an initial business case be made to justify the proposed investment before it is promoted to the "select" component. The "select" phase requires establishing baselines and performance measurement plans to properly align and conform with the joint strategic plan, joint performance plan or bureau performance plan, and joint enterprise architecture before being selected as a valuable initiative to fund;
 - (2) The "Control" phase ensures that IT initiatives are conducted in a disciplined, well-managed, and consistent manner, which promote the deliver of quality products, and result in initiatives that are executed to the performance baseline (cost, schedule, scope) and anticipated results (performance measures); and
 - (3) The "Evaluate" phase compares actual to expected results once a project has been fully implemented (performance baseline and performance measures).

NOTE: Both the "control" phase and the "evaluate" phase collect information about a funded initiative that focuses on a measurement of a program's performance, which is critical to identify any necessary improvements or modifications, and the need for additional or continued funding level.

- b. All IT program and project managers must develop a strong business case that:
 - (1) Provides supporting information to justify the investment, and clearly defines the business requirements that are being satisfied;

- (2) Demonstrates all reasonable and practical alternatives have been explored;
- (3) Demonstrates no capabilities or services are duplicated; and
- (4) Ensures EA and IT policies, procedures, and standards are adhered to and any necessary waivers have been approved.
- c. A business case must also identify and specify the relevant performance measures that the program sponsor, program manager, and project manager understand and agree with. Such measures must justify the use of the proposed IT resource, product, or service based on the required business needs, strategic objectives and goals, performance goals, and mission.
- d. Program and project managers must work with the program sponsor of the IT initiative before, during, and after a sponsor approves and funds the IT initiative. There must be a demonstration of how the investment is in compliance with, and is working to satisfy, the target joint enterprise architecture as part of the CPIC process.

5 FAM 678 WHAT ARE THE PRM PERFORMANCE MEASUREMENT AREAS?

5 FAM 678.1 Mission and Business Results Measurement Area

(CT:IM-74; 05-03-2006)

- a. The mission and business results measurement area within the PRM is a major component of the "line of sight" that must indicate what results, (i.e., outputs or outcomes) are expected to be achieved from the IT investment.
- b. The clearly defined outputs or outcomes should be developed during the budget and strategic planning process prescribed under the Government Performance Results Act (GPRA). To identify the mission and business results associated with an IT initiative, refer to the performance goals identified in the Joint (DOS/USAID) Performance Plan.
- c. To ensure the identified outputs are appropriately aligned to what the programs actually do, the mission and business results measurement area is driven by the BRM.

NOTE: The PRM's measurement categories are the same as the business areas and lines of business identified in the Joint BRM. These areas of the BRM identify the type and purpose of the activities conducted by the Department and USAID.

5 FAM 678.2 Customer Results Measurement Area

(CT:IM-74; 05-03-2006)

- a. The customer results measurement area is a vital part of the PRM that captures how well an enterprise-wide or specific process within the Department is serving its customers and citizens. The purpose of the customer results measurement area is to identify the customer relationship, articulate how it can be measured, and identify subsequent improvements made over time.
- b. The customer results measurement indicator captured in this measurement area will be associated with the most external customer of the process or activity the IT initiative supports (e.g., citizens, businesses, or other governments).

5 FAM 678.3 Processes and Activities Measurement Area

(CT:IM-74; 05-03-2006)

The Process and Activities Measurement Area of the PRM must identify and define the system, product, or service that will directly result from the process an IT initiative supports. The processes and activities measurement area is comprised of six categories: financial, productivity and efficiency, cycle time and timeliness, quality, security and privacy, and management and innovation.

5 FAM 678.4 Technology Measurement Area

(CT:IM-74; 05-03-2006)

- a. The Technology Measurement Area addresses key elements of performance directly relating to the IT initiative. An IT initiative can include applications, infrastructure, or services provided in support of a process or program.
- b. The technology measurement area is more relevant when used with other measurement areas to see a full and accurate picture of overall performance. As with all other measurement areas, the technology measurement categories and groupings do not represent exhaustive lists. Agencies may, and should, use additional technology measures as part of their IT CPIC and systems development lifecycle processes.
- c. While these IT-specific aspects of performance (e.g., percent system availability) are important, they alone do not truly assess the value of an IT initiative to overall performance.
- d. The technology measurement area consists of seven measurement

categories. These categories are: financial, quality, efficiency, information and data, reliability and availability, and effectiveness.

5 FAM 678.5 Human Capital Measurement Area

(CT:IM-74; 05-03-2006)

The PRM's Human Capital Measurement Area is required by legislation and best practices. Human capital measurement does not include specific measurement categories at the present time. The Federal Enterprise Architecture Program Management Office (FEA PMO) will begin to engage organizations, such as the Office of Personnel Management and the Chief Human Capital Officers Council, to work collaboratively to identify the key human capital requirements and a set of practical and usable measurement indicators in the Human Capital Measurement Area.

5 FAM 678.6 Other Fixed Assets Measurement Area

(CT:IM-74; 05-03-2006)

The PRM's Fixed Assets Measurement Area continues to be explored. A review of legislative requirements and best practices indicates that capturing the performance of other fixed assets (e.g., vehicle fleets, facilities, and other equipment) is critical. The PRM does not currently include specific measurement categories for fixed assets. The FEA PMO will engage officials knowledgeable about the management of other fixed assets as it begins to improve the PRM.

5 FAM 679 UNASSIGNED