

## Section 5: Program Management

Functional Area	Attributes	Traits	Level 1	Level 2	Level 3
			Basic Capabilities Characteristics	Evolving Maturity Characteristics	Demonstrated Maturity Characteristics
PROGRAM MANAGEMENT GOOD PROGRAM MANAGEMENT IS THE KEY TO DELIVERING NEW CAPABILITIES	<b>Functional Area Description:</b> The objective of FITARA is to improve the management of IT within an agency and hence, improve the ability for that agency to deliver its mission and conduct its business. Program management is either: 1) the set of activities to deliver a new or upgraded set of capabilities to ultimately support mission or business needs of the agency, and a program may involve a series of related, ongoing projects; or 2) the ongoing operations and maintenance of an existing production system. As part of a program, there may be one or more acquisitions (buying of labor or IT services, or hardware and software) to support the overall delivery of the program.				
	Note: Yellow highlights identify linkages to the M-15-14 Attachment A: Common Baseline for IT Management and CIO Assignment Plan elements.				
	<b>Program and project management disciplines:</b> Does the agency have a well-defined set of management disciplines (e.g., schedule, estimation, requirements, configuration, operations, and risk management) that are used consistently throughout the agency? Are mechanisms in place to ensure these disciplines are being properly applied in programs? Is there training and mentoring for personnel that serve on program teams? Is there a process to update these disciplines to ensure the agency is using modern program management?	Disciplines of sound program management are in place at start of a program	The agency has a process that ensures the program and project management disciplines are properly applied throughout the life of a program	The agency has a process to continually update management disciplines based on feedback from program staff and the latest industry practices	Expert help is available to support programs that are in need of help in implementing or refining management disciplines for a program
		Agency has defined a planning process that includes the CIO in the review of all IT components of mission program planning	Agency has defined a process that incorporates CFO, CIO and program leadership in reviews of IT spending in broader spending plans, but considers IT investments with other uses of agency funding	C1. CIO role in planning program management. CIO approves the IT components of any plans, through defined planning process, but agency head minimally balances IT investments with other uses of agency funding	CIO is fully involved with planning of IT resources at all points in their lifecycle, including operations, disposition and migration across all agency planning processes
		Project personnel are trained and certified in the disciplines and levels necessary for their initiative	Individuals on program teams have proper training in the application of program management disciplines	Individuals on program teams have proper training in the application of program management disciplines	Individuals on program teams have proper training in the application of program management disciplines that is engrained into the organization. Mentoring is available to programs that are struggling with implementation of one or more of the management disciplines
		PM has a defined budget evaluation process, that includes the CIO, in the review of all lifecycle and incremental development IT	The PM has ad hoc IT budget and spending reviews with budget personnel	The PM has established and documented processes and policies in place for sharing and update of all costing aspects of the program	The PM regularly holds cost updates and briefings in the lifecycle and incremental development cost planning, execution, and decision making and updates the CIO as required

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		component effecting cost			
		Project personnel are identified specifically for costing (budget) roles and responsibilities	Budget individual has basic training and experience in the budget area to perform general requirements (budget estimates and justifications, budget submissions and monitoring, and OMB reporting,	Budget individual has intermediate training and experience in the budget area to perform intermediary requirements (CBA, planning, execution, etc.)	Budget individual has advanced training and experience in the budget area to perform sophisticated requirements (e.g., complex financial and workload relationships; timing of obligations and expenditures in relation to the budget cycle; current and future resource needs; direct or indirect monetary impact of new legislation. Assignments are varied and complex and require in-depth analysis to determine the means of resolution and the application of a variety of non-related techniques and methods to a broad range of budget tasks, advises managers on appropriate budgetary action to be taken to meet agency needs, makes recommendations affecting substantive programs, monitors and reports on the rate of expenditure of funds, and alerts managers of trends in obligation of funds.)

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	<b>Horizontal integration:</b> Is there proper level of involvement from all appropriate stakeholders for programs, including representatives from the mission and business organization, CIO, CAO, CFO, CHCO, General Counsel, etc.? Are there clear and measurable success criteria that all stakeholders agree to? Is there an integrated program team that all program personnel belong to with reporting to a Program Manager on all aspects of the delivery of that program? Are all program personnel measured on meeting the success criteria for that program?	Integrated program teams are formed in which all appropriate stakeholders (to include mission or business organization, CIO, CAO, CHCO, CISO, etc.) have representatives on the program team	Program team integration is limited and some members of the program team are incentivized and their performance is to a degree measured on meeting the program success criteria. In addition to internal stakeholders, the team has identified external stakeholders for consultation during program execution	Program team consists of full business compliment and most members of the program team are incentivized and their performance is measured on meeting the program success criteria. The program team has an external stakeholder engagement plan	Program Team consists of full business compliment and all members of the program team are incentivized and their performance is substantially measured on meeting the program success criteria. The program team executes consistently on an external stakeholder engagement plan
	<b>Comprehensive and adaptable system development lifecycle (SDLC):</b> Does the agency have an appropriate system development lifecycle that lays out the approach or approaches that will be used to design, develop, test and deploy the system? Are there pre-defined paths for different types of IT projects? Can these paths easily be	The agency has a comprehensive system development lifecycle	The agency has a system development lifecycle (SDLC)	<b>G1. CIO defines IT processes and policies</b> The SDLC has paths pre-defined for some types of IT programs and can easily be tailored as required for a program. Paths accommodate both traditional linear and iterative/agile frameworks	The SDLC has paths pre-defined that can handle all types of IT programs and can easily be tailored as required for a program
		The agency has the necessary policies in place to support IT programs	<b>G1. CIO defines IT processes and policies</b> Agency policies and tools keep approval review process flowing, including use	Most approval processes and documents are integrated and developed with the intent to shorten time but not sacrifice completeness or quality	All approval processes and documents are integrated and developed with the intent to shorten time but not sacrifice completeness or quality

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	tailored to fit the needs of a program?		Strategic Sourcing vehicles to accelerate contracting timelines. Agency rapidly addresses disconnects or objections to reduce project timing impacts		
		The agency establishes a process for program managers to engage stakeholders	E1. Ongoing CIO engagement with program managers Customers are actively involved in upfront design and development processes to provide the insight and feedback to ensure that IT investments are incorporated into the agency's strategic plan	Customers are actively involved in the development and testing processes to provide the insight and feedback to ensure that IT investments are delivery customer value and business objectives	Customers are actively involved through-out the SDLC to define, design, and assessment requirements by providing insight and feedback to ensure that IT investments are delivery customer value and business objectives
	<b>Development and use of architecture:</b> Is there a business architecture for each program, which describes the overall process of what the system must do to support the desired business or mission outcomes? Is this business architecture derived from the appropriate portfolio of the EA? Is there appropriate focus on development of a solid technical architecture, especially for a complex system with a number of subsystems? Are there policies that prescribe the use of	Programs utilize a business architecture to define initiative mission or business outcomes	Some programs have a business architecture that define the overall mission or business mission outcomes	Most programs have a business architecture that defines the overall mission or business mission outcomes	All programs have a business architecture that defines the overall mission or business mission outcomes
		Business architecture is defined and derived from the EA	The business architecture for some programs is defined and derived from the EA	The business architecture for most programs is defined and derived from the EA, and there is clarity regarding how the program fits into and meets enterprise and portfolio requirements	The business architecture for all programs is defined and derived from the EA, and there is clarity regarding how the program fits into and meets enterprise and portfolio requirements. In addition, all programs have a well-defined technical architecture that leverages a common platform or infrastructure
		EA is integrated with IT governance	An EA process exists with some program governance integration to support program analysis and	An EA is integrated with governance, program offices, and acquisitions to establish an as-is state and more importantly, perform complete analysis	A mature EA is integrated with governance, program offices, and acquisitions to understand the as-is state and more importantly, perform complete analysis to make decisions that

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	shared IT infrastructure, leverage of existing capabilities where possible, and use of commercial off-the-shelf solutions to the degree possible?		alignment with targeted state for mission or business	to make decisions that are in alignment with targeted state for mission or business outcomes	are in alignment with targeted state for mission or business outcomes
		EA contains security architecture	The agency's EA recognizes the importance of IT Security, but there are significant gaps in some portfolios and programs	The agency's EA recognizes the importance of IT Security, but there are still gaps in some portfolios and programs	The agency's EA recognizes the importance of IT Security, capturing an as-is state and also has determined a to-be state for security at an enterprise, portfolio, and program level
	<b>Right Timing:</b> Best practice for IT programs is to field smaller and incremental releases of functionality to lower risk and get end user feedback to ensure the program is provide value to the customer. Are the agency's leadership, processes, and culture enabling programs too rapidly to deliver capabilities? Is decision making streamlined to minimize delays?	Governance process enables proper engagement and decision making to expedite delivery	The agency's culture and governance process requires decision making at the enterprise level, no matter the program size, complexity, and risk	The agency's culture and governance process allows for some delegated decision making at the lowest level possible, based on program size, complexity, and risk	The agency has a culture and governance process to delegate decision making to the lowest level possible
		The majority of IT capabilities are delivered via small, frequent releases providing iterative functionality and responsive to changes in business, technologies, risks, and budgets	Some IT projects are delivered via small, frequent releases providing iterative functionality and responsive to changes in business, technologies, risks, and budgets	<b>G1. CIO defines IT processes and policies</b> The majority IT projects and some program are delivered via small, frequent releases providing iterative functionality and responsive to changes in business, technologies, risks, and budgets	The majority of IT capabilities are delivered via small, frequent releases providing iterative functionality and responsive to changes in business, technologies, risks, and budgets. In addition, the agency is using a common platform or infrastructure in the default design to enable ease of integration, and reduce program scope, cost, schedule, and risk
		Programs use well-established solutions to expedite time to delivery	Programs use commercial off-the-shelf solutions when possible and leverage portfolio strategies, contracts, and architectures to accelerate deliveries	In addition to using commercial off-the-shelf solutions when possible, programs leverage the use of existing agency components or services	Programs are required to leverage existing services, components and software standards to the maximum degree possible
	<b>Right Information:</b> Do program teams have the have the means to obtain the right information to	The agency has the necessary mechanisms in place to baseline and monitor	While the agency has standard reporting mechanisms in place, each project individually	While the agency has standard reporting mechanisms in place, programs determines how they will baseline and	The agency has standard reporting mechanisms in place that all programs follow to establish a baseline and standard toolset to monitor

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	be able to make properly informed decisions? Are there quality control mechanisms to help ensure the information is correct? Is there evidence-based decision making that is properly integrated with the governance process? Is there transparency and information accountability? Are metrics actively used to measure effectiveness of program delivery?	program performance	determines how it will baseline and what tools it will use monitor cost, schedule and performance	what tools they will use to monitor cost, schedule and performance. TBM is somewhat implemented giving the agency a clearer picture of IT spend for each program	cost, schedule and performance. TBM is fully implemented giving the agency a clearer picture of IT spend for each program
		Agency has a process to share information and perform analysis required to support program decision making	Demonstrated capability to provide some program information and analysis required to support informed decision-making using reliable underlying data	Demonstrated capability to provide most program information and analysis required to support informed decision-making using reliable underlying data	Demonstrated capability to provide all program information and analysis required to support informed decision-making using reliable underlying data
		Agency has a standard method for reporting on program status, risks, issues, and recommendations	Program staff provide basic reporting on program status, risks, issues, and recommendations	Program staff provide consistent and complete reporting on program status, risks, issues, and recommendations	Program staff provide consistent and complete reporting on program status, risks, issues, and recommendations via dashboards because standards and tools for reporting are fully defined and implemented
		Agency has metrics and dashboards in place to track programs and make improvements	<b>G1. CIO defines IT processes and policies</b> The agency has some program execution process metrics that are tracked and used to make improvements with results posted to Federal IT Dashboard	Program outcome and effectiveness tracking is part of agency process with data accurately reflecting the true status of the programs. Some program execution process metrics are tracked and used to make improvements to include benchmarking IT costs through TBM	All program execution process metrics are tracked and used to make improvements. Dashboards provide real time view of portfolio, program, and acquisition status, allow for drill-downs for specifics, and are tailored for specific stakeholder needs. This includes full IT cost reporting through TBM
	<b>Risk Management (while a specific management discipline, risk management is so critical to program success that is recognized as an attribute for assessing program management)</b>	Agency uses risk management as a standard mechanism for assessing probability of program delivery	Agency has a comprehensive risk management process in place for use by projects and programs, as appropriate	Agency has a comprehensive and well documented risk management process in place for programs, with risks and their relationships, impacts, and dependencies assessed by the program team and governance structure, as appropriate	Agency ensures all programs are using the risk management process and validates programs have properly implemented and are executing risk management

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	<b>maturity):</b> Does the agency have a comprehensive program risk management approach, to include risk identification and impact assessment, risk prioritization analysis, risk mitigation, and risk reporting? Is there proper escalation processes in place to address risks? Does the agency have the processes in place to ensure that a TechStat is triggered when an agency determines that a project is high risk?	The agency has established processes to ensure that a TechStat is triggered when an agency determines that a project is high risk	TechStats are sometimes conducted for high-risk programs	<b>J1. CIO role in recommending modification, termination or pause of IT projects.</b> TechStats are routinely conducted for high-risk programs	Agency TechStats are routinely used so that programs do not become high-risk
		Risks are integrated into program decision-making	Risks are clearly understood by senior program staff. Decision making focuses on risks proactively. Prioritization is based on a balanced set of factors, including probability, degree of impact, past history and interdependencies	Risks are clearly understood at all levels of staff and contractors on a program and its constituent projects. Decision making focuses on proactive management of risks. Prioritization is based on a balanced set of factors, including probability, degree of impact, past history and interdependencies	Risks are clearly understood at all levels of staff and contractors on a program and its constituent projects. Decision making focuses on proactive management of risks. Prioritization is based on a balanced set of factors, including probability, degree of impact, past history and interdependencies
	<b>Information Security (IS) (while a specific technology area and set of requirements for a program, information security is so critical that is recognized as an attribute for assessing program management maturity):</b> Do programs properly recognize and incorporate information security requirements? Does the agency have proactive means in place to keep information security policies and approaches current? Does the agency measure	The agency has integrated IS into IT programs	The agency has included IS upfront in some programs, leveraging CIO EA and standards	The agency has included IS upfront in most programs, leveraging CIO EA and standards	The agency has fully integrated IS in all programs, leveraging CIO EA and standards
		IS requirements are integrated into the system development lifecycle	Security defects are found and addressed during final testing of program. Program implementations delayed due to minimal security requirements defined early, delaying ability to obtain Authority to Operate	Most security defects are found during development. Post-production defects are reduced. Program implementations completes security requirements to obtain Authority to Operate	Security is incorporated throughout the system development lifecycle to eliminate the majority of post-production defects
		The agency includes IS and supply chain logistics requirements in IT procurements	The agency includes IS requirements in IT procurements	The agency includes IS and supply chain logistics requirements in IT procurements	The agency includes IS and supply chain logistics requirements in IT procurements and there is a continual process to assess and improve IS requirements for IT procurements



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	effectiveness of information security outcomes by actively collecting metrics? Does the agency use metrics to improve programs and acquisition processes?	The agency has an approach to ensure IT security policies and approaches for programs and acquisitions are kept current	There is some IT security process metric tracking and there is a review process to leverage leading IT security practices	There is IT security process metric tracking and there is a review process to leverage leading IT security practices	IT security process metrics are tracked and there is a process to review and leverage leading IT security practices to be used to make improvements to the Agency's IT security policies, approaches and IT programs and acquisitions
		Metrics are used to measure effectiveness of IT security outcomes and improve acquisition processes	IT security and supply chain risk management measures are defined but collection and use of measures varies by program and acquisitions	The agency has initiated integration of IS and supply chain risk management measures and analysis into program strategies and acquisitions for development, implementation, operations and procurements	The agency has fully integrated IS and supply chain risk management measures and analysis into program strategies and acquisitions for development, implementation, operations and procurements