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Medicaid Enterprise System (MES) Procurement Project

Strategic Enterprise Advisory Services (SEAS)

T-7 Design and Implementation Management Standards

Version: 100

Creation Date: August 23, 2018

Created By: The SEAS Vendor

Submitted To: AHCA MES Project Management

Revision History

DATE	VERSION	DESCRIPTION	AUTHOR
5/25/2018	001	T-7 Design and Implementation Management Standards Development Draft Version (Entry)	Sandy Berger/Rich Cefola
7/13/2018	002	T-7 Design and Implementation Management Standards Development Draft Version (Resubmission)	Sandy Berger/Rich Cefola / Paul Moore
8/8/2018	003	T-7 Design and Implementation Management Standards Development Draft Version (Resubmission)	Paul Moore / Mike Griffiths
8/16/2018	004	T-7 Design and Implementation Management Standards Development Draft Version (Resubmission)	Paul Moore
8/23/2018	100	T-5 Design and Implementation Management Standards Development approved baseline version	Sean Gibbs

Modifications to the approved baseline version (100) of this artifact must be made in accordance with the Change Control process that is part of the Scope Management Plan.

Quality Review History

DATE	REVIEWER	COMMENTS
5/30/2018	Sean Gibbs	QA Submission Review
7/26/2018	Sean Gibbs	QA Submission Review
8/7/2018	Sean Gibbs	QA Submission Review
8/16/2018	Sean Gibbs	QA Submission Review

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SECTION 1   INTRODUCTION

1.1 BACKGROUND

The Florida Agency for Health Care Administration (Agency) is preparing for the changing landscape of health care administration and increased use of the Centers for Medicare and Medicaid Services (CMS) Medicaid Information Technology Architecture (MITA) to improve the administration and operation of the Florida Medicaid Enterprise. The current Florida Medicaid Enterprise includes services, business processes, data management, and processes, technical processes within the Agency, and interconnections and touch points with systems that reside outside the Agency necessary for administration of the Florida Medicaid program. The current Florida Medicaid Enterprise System (MES) includes the Florida Medicaid Management Information System (FMMIS), Decision Support System (DSS), and other systems operated by different vendors. These systems in the MES interface primarily through the exchange of data files, via Secured File Transfer Protocol. These point-to-point interfaces become more complex and costly as the number of systems and applications increase. The future of the Florida Medicaid Enterprise integration is to allow Florida Medicaid to secure services that can interoperate and communicate without relying on a common platform or technology. Connecting services and infrastructures, and developing integration standards are the next steps for advancing the MES level of MITA maturity and system modularity modernization.

The CMS released the Medicaid Program Final Rule: Mechanized Claims Processing and Information Retrieval Systems in December 2015. This final rule modifies regulations pertaining to 42 Code of Federal Regulations (CFR) 433 and 45 CFR 95.6111, effective January 1, 2016. Among other changes, this final rule supports increased use of the MITA Framework. MITA is a CMS initiative that fosters an integrated business and information technology (IT) transformation across the Medicaid enterprise to improve the administration and operation of the Medicaid program. The Agency documents its high-level plans to increase service interoperability and advance the maturity of the MES in accordance with the MITA Framework in the Florida MES Procurement Strategy document.

1.2 PURPOSE

The purpose of the T-7: Design and Implementation Management Standards deliverable is to:

- define the minimum set of design and implementation management standards
- establish a process to maintain the standards
- develop management template reports for MES Vendors to use as guidelines in performing design and implementation processes
- establish a protocol for the SEAS Vendor to assist the Agency in reviewing and monitoring the standards throughout a MES Project

The MES Design and Implementation Management Standards document may contain links to updated versions of documents and diagrams, referenced in the following sections of this document that resides in the MES Projects Repository.

1.3   SCOPE STATEMENT

This deliverable is an iterative document maintained and updated as the MES Design and Implementation standards evolve. The deliverable emphasizes modularity and interoperability across the Agency.

This iteration of the deliverable establishes an initial list of design and implementation management standards for the Medicaid Enterprise with emphasis on the foundational capabilities of Integration Services Integration Platform (IS/IP) including the Enterprise Service Bus (ESB), Enterprise Data Warehouse (EDW), and modular capability implementation. Deliverable content includes:

- **Section 1 Introduction** – Outlines the background, purpose, scope statement, goals and objectives, and reference documents used to prepare the deliverable.

- **Section 2 Roles and Responsibilities** - Lists the responsibilities of each of the MES stakeholders during the design and implementation phases of the project.

- **Section 3 Design and Implementation Management Standards Overview** - Outlines the structure to manage each MES project from initial design through implementation and describes how these Design and Implementation Management Standards align with and complement the P2: SEAS Project Management Standards established for the MES Project.

- **Section 4 Process to Define Design and Implementation Standards** - Describes the analysis of Florida-specific, national and other state standards to define the standards and provides a roles and responsibilities chart for review and approval of initial Design and Implementation Management Plans from MES Vendors. This section also includes a brief description of each design and implementation plan template.

- **Section 5 Applicability Decision Tree** - Provides a description of the MES Decision Tree Analysis Process and Tool. This decision tree merges artifact development guidance from the XLC Project Process Agreement based on CMS XLC complexity level (1-3) and AST Risk and Complexity Assessment Level (1-4). This section also includes a matrix to show the stage when each design and implementation plan is used and tables that show the plans required for all projects regardless of scope and plans that are optional based on functionality of the selected module.

- **Section 6 Standards Support and Expertise** – Describes the SEAS support and expertise provided throughout requirements analysis and design through implementation phases of a MES Project and how design and implementation activities leverage procedures established in the SEAS T-6: Technology Standards, Appendix E *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures,* for all technical standards support.

- **Section 7 Implementation Status Reporting** – Summarizes and provides reference to the P-2: SEAS Project Management Standards and the SEAS T-6: Technology Standards, Appendix E *Technology Standards Communication, Support, Compliance, and Compliance Reporting*

Procedures, as the procedures for monitoring and reporting implementation status for the design and implementation standards.

1.4   GOALS AND OBJECTIVES

- Goal #1 – Provide clear and consistent expectations to MES Project Teams of work products and process to design and implement systems.
    - › Objective #1 – Define the minimum set of Design and Implementation Management Standards used by the Agency based on national and state standards.
    - › Objective #2 – Establish a process to maintain and update the standards over the course of the MES Project.
- Goal #2 – Align the Design and Implementation Management standards with other PMO or technical standards within the MES Project to increase standardization, reduce duplication of work effort and produce supporting documentation that meets the certification goals for new systems and services.
    - › Objective #1 – Review and reuse the established PMO or technical standards processes for developing, monitoring, and reporting design and implementation activities as applicable.

1.5   REFERENCED DOCUMENTS

Documents referenced to support the development of this deliverable include the following:

- MES P-2: SEAS Project Management Standards, available for review on the MES Projects Repository
- MES P-4: Medicaid Enterprise Certification Management Plan, available for review on the MES Projects Repository
- Centers for Medicare & Medicaid Services (CMS) eXpedited Life Cycle (XLC)
- Medicaid Enterprise Certification Toolkit (MECT 2.2)
- Agency for Health Care Administration Division of Information Technology (AHCA IT) Office References – Information Systems Development Methodology (ISDM)
- Florida Medicaid Management Information System/Decision Support System/Fiscal Agent Operations – Project Management Office Operational Procedures Manual
- State of Tennessee, Project Management Office (PMO) Design and Implementation Management Standards
- National Institute of Standards and Technology (NIST) Special Publication 800-34, *Contingency Planning Guide for Federal Information Systems*

1.6   STRATEGIC TOPIC INVENTORY

This document provides guidance on design and implementation strategy topics. In the development of MES technology deliverables, the SEAS Vendor created a Strategic Topic Inventory tool used to develop and communicate the Agency's direction on a variety of data

standards topics. The tool organizes topics into a hierarchical taxonomy based logical groupings in areas of interest to strategic, programmatic, technology and program management domains.

The Strategic Topic Inventory has many features to present and communicate a spectrum of strategic direction options considered across the duration of the project for a specific topic. A summary chart can dynamically display the strategic direction for a specific topic across the time spectrum from current state direction to direction for future years. The Strategic Topic Inventory includes a field documenting a summary analysis that describes the context and considerations that influenced the defined strategy for each specific topic.

Extracts of topic specific summary charts from the Strategic Topic Inventory tool are included throughout this document to communicate strategy and direction for many of the important design and implementation standards decisions that are important for MES Program stakeholders to understand.

Over the course of the MES Project, the SEAS Vendor will continue to define and elaborate strategic direction on many design and implementation standards topics. The SEAS Vendor intends to continue to use the Strategic Topic Inventory tool as a discussion, recommendation, and communication vehicle for defining design and implementation standards direction as topics arise. MES Project Teams that identify additional topics that require MES strategic direction can communicate the topic to the SEAS Vendor. MES Project Teams can review strategic topic descriptions on the MES Projects Repository.

Below is a hyperlink to the active Strategic Topic Inventory on the MES Projects Repository.

SEAS Strategic Topic Inventory

The link is to the active file that will open to the tab that was open when last saved. The Chart tab shows topic data for the last topic displayed in the saved version.

Exhibit 1-1: Strategic Topic Tool shows a screenshot example of a populated strategic topic.

Area:	Service Delivery - Data			Description:				
Category:	Data Modeling			What data format / tool should data dictionary content be maintained in and provided to information consumers?				
Sub-Category	Data Dictionary							
Topic:	Data Dictionary Format / Tool							
Importance:	Low	Strategy Status:	Presented					
Displaying Row:	425							
Strategic Direction		Current	2018	2020	2022	2025		
ACHA IT		Various (Excel, Word, etc.)	->	Agency Choice (Erwin preferred)	->			
FMMIS		iTrace / Erwin	->	Agency Choice (Erwin preferred)	->			
MES Program			Erwin (2019) with export to MES Repository	->				
Module Specific				Vendor Choice (Erwin preferred)	->			
Other Agencies		Agency Preference	->	Agency Choice (Erwin preferred)	->			
Analysis:		Currently, AHCA IT documents its data dictionary in various sources (Excel, Word, etc.) while the FMMIS data dictionary is documented in iTrace.						
		The future state strategy is to create the data dictionary in Erwin with an export to the MES Repository. This work will start in 2019 as the Agency begins modular implementation. Module vendors are required to provide Erwin compatible data dictionaries that are able to be integrated into the central Erwin data dictionary.						

Exhibit 1-1: Strategic Topic Tool

The SEAS Vendor developed and maintains this Microsoft Excel based tool that resides as a document on the MES Projects Repository.

SECTION 2   ROLES AND RESPONSIBILITIES

This section identifies the roles and responsibilities for the primary stakeholders that maintain or use this document.

ROLE	RESPONSIBILITY
MES Governance Committee	▪ Provide decision making, leadership and guidance on the overall strategic direction of the program ▪ MES Governance Committee roles and responsibilities, priorities, decision and authority rights, members, and other key Committee information provided in the Enterprise System Governance Plan
MES Project Sponsor	▪ Provide leadership and guidance on the overall strategic direction of the project ▪ Authorizes the use of critical resources and support for the project and is accountable for enabling its overall success ▪ Has project ownership and overall programmatic responsibility for the successful development and implementation of the project

MES Director	▪ Provides guidance, direction, and oversight over the SEAS Vendor who is:
	  › Accountable for ensuring processes are in place for the execution of the MES Design and Implementation Standards
	  › Accountable for ensuring expectations (contracts) are in place for MES Vendors to develop Design and Implementation Management Plans, adhering to guidance and templates
	  › Accountable for ensuring adequate training is provided to MES Vendors on Project Standards and Integrated processes
	  › Accountable for ensuring processes are in place for the coordination of shared Agency resources
	  › Accountable for ensuring tools and processes are in place for the centralized support of managing changes and tracking risks, issues, decisions, and lessons learned

AHCA MES Technical Domain Lead	▪ Coordinate participation of Agency stakeholders that identify technology management strategy topics needing definition, decision or elaboration, review and provide feedback on proposed technology management strategy topics ▪ Communicate technology management strategy to Agency MES Domain Leads ▪ Support MES Program leadership communication to Agency executive leadership ▪ Approve communications between the SEAS Vendor and MES Stakeholder Organizations related to MES Design and Implementation Management Strategy

Role	Responsibility
SEAS Vendor	▪ Responsible for ensuring tools and processes are in place for the execution of the MES Design and Implementation Management Standards ▪ Responsible for developing a SEAS Management Plan and SEAS integrated processes ▪ Responsible for coordinating integrated processes ▪ Responsible for administering assessment processes ▪ Responsible for developing adequate training for MES Vendors on Project Standards, Integrated processes, and Design and Implementation Standards ▪ Responsible for coordination of tools and processes for managing changes ▪ Responsible for producing timely and accurate status reporting ▪ Responsible for defining the minimum set of design and implementation management standards ▪ Responsible for developing and maintaining an Applicability Decision Tree to determine the design and implementation plan standards that are relevant for each MES Project ▪ Responsible for providing standards support and expertise throughout the MES Project ▪ Responsible for producing implementation status reporting of MES Projects
MES IV&V Vendor	▪ Provide independent, objective assessments of project processes and report observations to appropriate level of governance as defined in the Strategic Enterprise Governance Plan to facilitate informed decision-making regarding system development and deployment ▪ Independently monitor MES CMS Certification status and report certification progress to CMS ▪ Verify the project has the strategy, management backing, resources, skills, and incentives necessary for an effective project ▪ Evaluate project progress, resources, cost, schedules, work flow, and reporting; evaluate project reporting process and actual project reports to verify project status is accurately traced using project metrics ▪ Verify the project's organizational structure supports training, process definition, independent Quality Assurance, Configuration Management, product evaluation, and any other functions critical for the project's success

ROLE	RESPONSIBILITY
MES Vendors	- Develop and execute processes in alignment with the MES Design and Implementation Management Standards - Develop and execute processes in alignment with the MES integrated processes and standards - Provide resources to complete assigned work as scheduled or within planned timelines - Responsible for communicating and executing design and implementation management standards - Responsible for preparing documentation and supporting the CMS Certification process reviews related to their business in a manner described in the P-4 Medicaid Enterprise Certification Management Plan

Exhibit 2-1: Roles and Responsibilities

SECTION 3   DESIGN AND IMPLEMENTATION MANAGEMENT STANDARDS OVERVIEW

The Design and Implementation Management Standards provide important guidance to standardize, align, and manage MES Projects that implement or modify systems or services. The Design and Implementation Management Standards are tools to improve consistency, increase efficiency, and simplify integration and reuse of systems and services. The Standards contain templates and guidance that define content and format expectations for design and implementation related documentation. Standardized design and implementation management related documentation enables:

- efficient review and verification by the Agency, SEAS Vendor, IV&V Vendor, IS/IP Vendor and other interested parties

- understanding and confidence in services implemented by other vendors

- reuse, integration and evolution of high quality content in deliverables

Design and implementation standards also help MES Projects to increase quality, consistency, and communication effectiveness across the Medicaid Enterprise.

This section outlines the structure to manage each MES Project from initial design through implementation. This section also describes how these Design and Implementation Management Standards align with and complement the PMO Standards established for the MES Project.

3.1   STRUCTURE FOR MANAGING DESIGN THROUGH IMPLEMENTATION

The MES Design and Implementation Management Standards focus on the project stages that follow project definition and project initiation. Each MES Project will have unique scope, different expected outcomes, different stakeholders, and use different MES Vendors and Agency resources. For this reason, it is especially important that MES Projects follow design and implementation management standards. Adhering to standards improves the quality, efficiency, delivery consistency and ultimately cost effectiveness of the overall MES Project.

3.1.1   ORGANIZATION STRUCTURE FOR DESIGN THROUGH IMPLEMENTATION

For MES Projects, the following organizational responsibilities and relationships exist:

- MES Vendor is contractually responsible to the Agency for design through implementation activities.

- The SEAS Vendor is contractually responsible to the Agency for providing strategic advisory services, standards definitions, support, assessment of MES Project deliverables, and MES Project reporting to the Agency.

- The IS/IP Vendor is contractually responsible to the Agency for providing and operating an integration platform and providing integration services that result in interoperability between systems, applications and services.

- The IV&V Vendor is contractually responsible to the Agency and reports to CMS in performing independent verification and validation.

- External organizations perform interface and integration services based on interface control documents and data sharing agreements.

- Florida's Agency for State Technology (AST) provides oversight of the MES Program on behalf of the Florida Executive Office of the Governor (EOG) and Legislature.

- MES Governance entities make decisions and provide guidance to the MES Project.

- Agency Business Units provide resources to participate in MES Projects as defined in MES Project Definitions.

- The Agency IT Change Advisory Board (CAB) controls IT System changes, version releases, compliance with Agency IT Change Control policies, and audits.

3.1.2 MES PROJECT WORK MANAGEMENT DESIGN THROUGH IMPLEMENTATION

All MES Projects will follow sound system development life cycle management practices. There will be variations in the scope of services performed by different MES Projects. MES projects may implement Commercial off the Shelf (COTS) package solutions, custom developed solutions, Software as a Service (SaaS), or Platform as a service (PaaS) solutions. MES projects may require different amounts of data conversion, organizational change management, and user training. Regardless of the specific implementation, each MES project that implements or modifies systems, and applications or data, will need to:

- Initiate the project, confirm the project goals and plan the design and implementation work

- Confirm and elaborate business and technical requirements

- Perform analysis and design the solution to meet the business needs and required project outcomes

- Develop and configure software Test that the system and processing meet the business needs

- Implement the system

- Operate and maintain the system

The activities from requirements through implementation are the focus of the MES Design and Implementation Management Standards.

The MES Project Life Cycle (MPLC) is a system development life cycle based on the CMS eXpedited Life Cycle (XLC) customized to Agency and Florida specific project implementation processes. The XLC is a framework developed by CMS for defining tasks performed at each phase in the software implementation process. The XLC provides the structure and definition of activities followed by a system implementation team. It consists of a detailed plan describing how to develop, maintain, and replace specific software. Throughout this document, the term

MPLC means the MES Program specific system development life cycle based on the CMS XLC. Appendix D External References contains links to CMS documentation about the XLC:

- **CMS XLC Process Overview**
- **CMS XLC Artifacts and Templates**
- **XLC Artifact Table**
- **CMS Project Process Agreement**

As there are different solution implementation activities for MES Projects, there are also variations in activities that depend on different system development methodologies. The waterfall or iterative waterfall is the most common system development methodology used for large complex programs like the MES Program. This methodology aligns with Agency resource availability, Agency contracting processes, State budgeting requirements and federal review processes. For this reason, this iteration of the MES Design and Implementation Management Standards will assume use of a waterfall or iterative waterfall methodology for most MES Projects. The standards and templates described in this document will build from this assumption. If MES Projects use the Agile methodology, the MES Project would need additional standards, templates and reporting processes.

Exhibit 3-1: System Strategy and Portfolio Management Execution Process is the overall MES Program Execution Process. MES Design and Implementation Management standards primarily relate to activities depicted as Phase 8 System Delivery Management in the overall process.
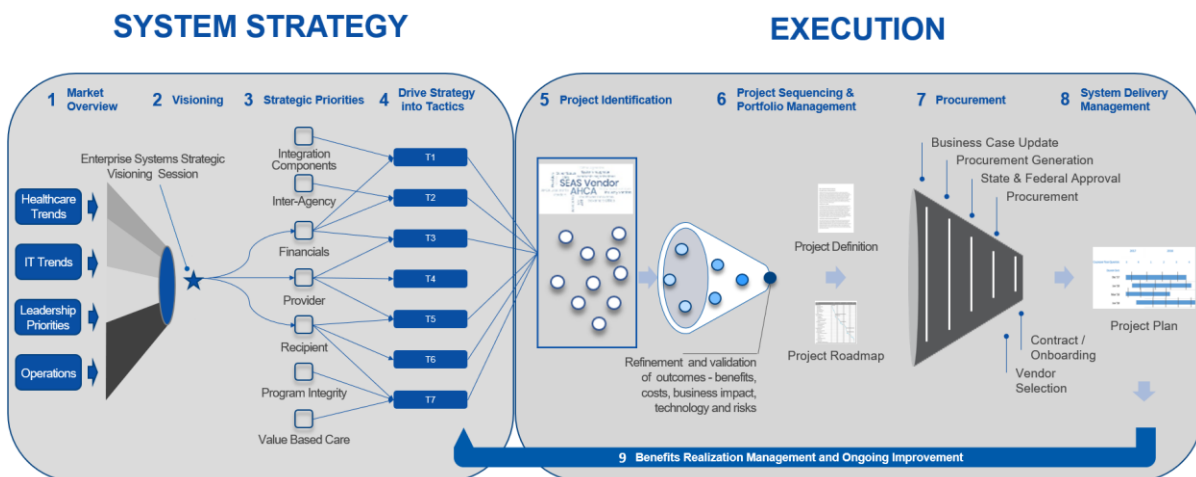
Exhibit 3-1: System Strategy and Portfolio Management Execution Process

Exhibit 3-2: MES Project Life Cycle Phases shows the System Delivery Management phase organized into major phases for a specific MES Project. The system delivery management activities are referred to as the MES Project Life Cycle (MPLC). The MPLC provides structure to improve the quality of software and overall system delivery management.

Initiation, Concept & Planning	Requirements Analysis & Design	Development & Test	Implementation	Operations & Maintenance	Disposition

Exhibit 3-2: MES Project Life Cycle Phases

The following descriptions of each phase of the MPLC originate from the CMS XLC phase descriptions.

- **Initiation, Concept and Planning:** The business owner and assigned project lead of the project identifies and confirms the business objectives and presents the plans for achieving the business goals and objectives. The project lead also creates/verifies or updates the Acquisition Strategy during this phase and throughout the life cycle. The activities of this phase include:
  - › Identify significant assumptions and constraints, and explore alternatives
  - › Identify project goals, objectives, risks, and clear and measurable success factors
  - › Develop the architectural framework and high-level content
  - › Approve the project based on evidence that the business needs will be met, and the solution will conform to the Technical Reference Architecture
  - › Analyze how the project will be managed, culminating in the Project Management Plan.

- **Requirements Analysis and Design:** A common set of business rules are refined, and the business requirements are validated and broken down into functional and non-functional requirements. The requirements are used to 1) define the design in detail, including inputs, processes, outputs, and interfaces, and 2) permit further detailed project management planning. In this phase, initial traceability begins between requirements, design, and solution testing. Requirements need to be testable to facilitate system acceptance later in the life cycle.
  - › Detailed specifications are developed to support the IT solution that fulfills the requirements for a particular release.
  - › The requirements and logical description of the entities, relationships, and attributes of the data are defined and allocated into system and data design specifications. These design specifications are organized in a way suitable for implementation and testing within the constraints of a physical environment (e.g., computer, database, and infrastructure).

- **Development and Test:** The detailed requirements and design information documented in the previous phase are transformed into machine-executable form and tested.
  - › The detailed requirements and design information are verified and validated so that all the individual system components (and data) of the IT solution function correctly and interface properly with other components within the system.
  - › System hardware, networking, telecommunications and security equipment, and Commercial Off-the-Shelf (COTS) software are configured.

- › New custom-software business applications and services are developed, database(s) are built, and software components are integrated.

- › Test data and test case specifications are finalized, and tests are conducted for individual components, integration, and end-to-end functionality from end-consumer to all systems and back, testing all federal and state agencies, as appropriate, to ensure accurate functionality and data.

- › Tests verify and validate that the IT solution fulfills all business, functional, and non-functional requirements for the release.

- › IT solution system components, data, and infrastructure are migrated from a development environment to a development test environment to pre-production test environment.

- › The IT solution undergoes full integration, security, and stress testing in the pre-production environment. Integration testing should test use of shared data sets utilized by interconnecting systems (shared sets of providers, members, claims etc.) Integration testing should also address 'reverse integration' where a new modular component operates alongside the remaining legacy system (with module provided business functions deactivated) and also test subsequent integration with components that ultimately replace the legacy system. The *Test Plan* artifact describes the testing approach for each type of testing.

- › All system deployment and configuration management activities are executed as a dry run during this phase, including data conversion

- ▪ **Implementation:** During the implementation phase, the project conducts a further level of operational readiness testing in a close to production environment. Users receive training to operate and maintain the IT solution. The IT solution is put into production based on Authority to Operate (ATO). The final IT solution must receive an Authority to Operate (ATO) before deployment to the Production environment.

- ▪ **Operations and Maintenance / Disposition:** The IT solution's system components, data, and infrastructure are maintained in the production environment and monitored to confirm the system meets business needs.

  - › The first review performed about six months after entering production is a Post Implementation Review (PIR). PIR focuses on lessons learned during the development and implementation of the solution.

  - › All investments with operational systems undergo an Annual Operational Assessment (AOA).

  - › When a system no longer meets a business need, a Disposition Plan is presented at a Disposition Review (DR) and the system is subsequently retired in accordance with the approved plan. A DR ensures correct and complete plans are in place to confirm the system is completely transitioned and properly disposed.

3.1.3 STRUCTURE OF MES STANDARDS

The MES Design and Implementation Standards are a specific type of standards that focus on system development and implementation activities. These differ from the other types of standards in the Technology Standards Reference Guide (TSRG). The TSRG is the repository for all types of technology domain standards including:

- **System Component Product Standards** – The Technology Standards Reference Model (TSRM) defines the major types of system components implemented or to-be implemented in the MES Program. System Component Product Standards specify acceptable vendor products or system capabilities available for use. An example of a product standard related to a system component is the list of acceptable business rules engine software for use in the MES.

- **System Component Specific Standards** – There are also component specific standards that may relate to data, technology, design and implementation or security standards. An example of system component specific standard is the requirement to use Business Process Model Notation (BPMN) for the business process management engines component.

- **MPLC Phase Specific Standards** – MPLC phase specific standards are those standards that are not incorporated in design and implementation management plan templates. There are a small number of design and implementation management standards because most are defined project requirements or embedded in MES Design and Implementation Management Plan templates. An example of a MPLC Phase Specific Standard is the standard to adhere to NIST SP 800-34, Revision 1 from the NIST IT Contingency Planning Guide on interim measures to recover information system services after a disruption.

- **MES Design and Implementation Management Templates** – MES Design and Implementation Management templates provide structure and guidance to help MES Project Vendors to develop system development artifacts that follow MES MPLC phase specific standards. An example of a MES Design and Implementation Management Template is the MES Testing Management Template.

Exhibit 3-3: Structure of MES Technology Standards depicts the relationship of the MES Design and Implementation Standards to other standards in the MES Technology Domain.
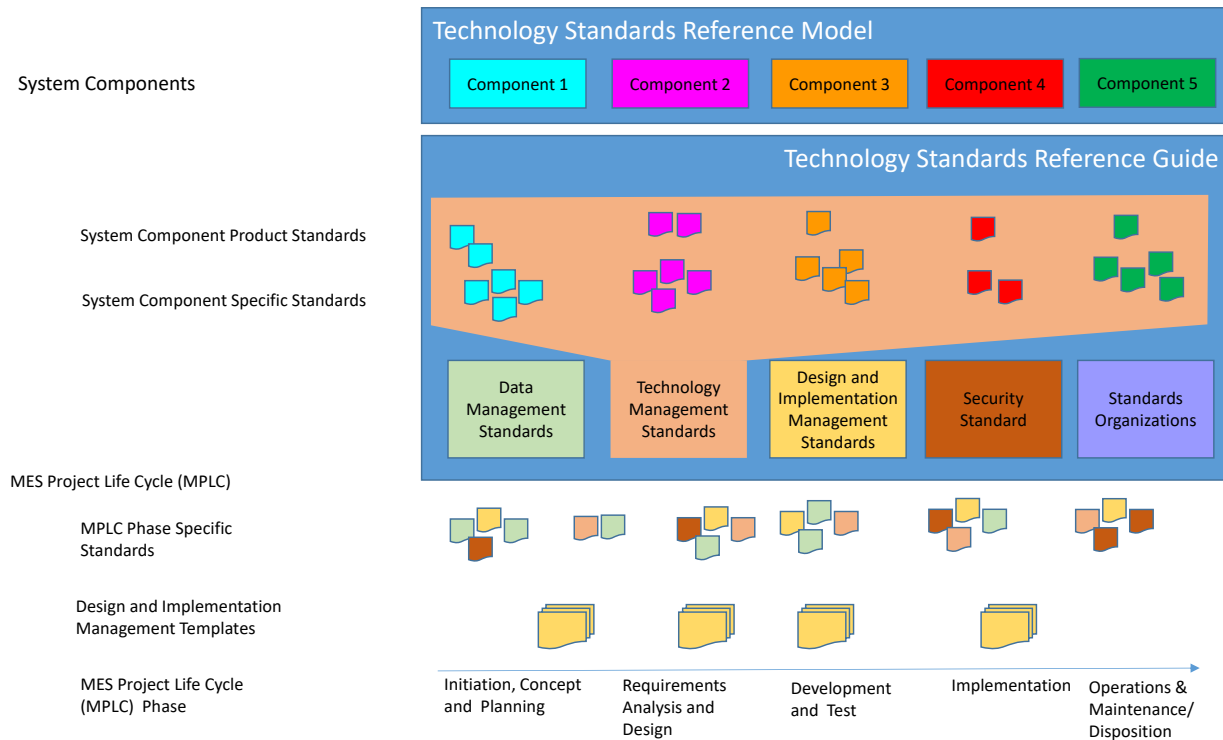
Exhibit 3-3: Structure of MES Technology Standards

All technology standards reside in the Technology Standards Reference Guide. For technology components (which are defined in the Technology Standards Reference Model), there are two types of standards. System component product standards specify specific COTS products used with the component. Component specific standards provide guidance related to implementation and use of the specific component. System component standards are independent of the MES Project life cycle phases or activities.

There are multiple types of technology standards about system development activities. These include data standards, technology management standards, design and implementation standards, and security standards. Information about standards organizations is also included in the TSRG. Design and Implementation Management Plan templates also embed MPLC phase specific technology standards. The diagram above depicts that for a given phase there may be a combination of data, technology management, design, and implementation standards applicable to each phase.

3.1.4 ACCEPTABLE SDLC METHODOLOGIES

This iteration of the MES Design and Implementation Management Standards assumes use of Waterfall methodology to implement MES Projects. While the content in templates is generalized allowing flexibility, most templates presume iterative or traditional waterfall

methodology. MES Projects that use other methodologies (e.g. Agile) may customize the templates to optimize for the specific methodology used.

Strategic Topic 3-1: Acceptable Implementation Methodologies describes implementation methodologies that are suitable for MES Projects.

ACCEPTABLE IMPLEMENTATION METHODOLOGIES	Current	2018	TIMELINE 2020	2022	2025
Agile				Preferred, particularly if there is a large user interface component	->
Lean					
Waterfall		Acceptable	->		
Iterative					

ANALYSIS

The industry has trended toward using an Agile methodology (Scrum or Kanban) as a delivery approach for software projects. The use of Agile would require a change in the collaboration and involvement from Agency stakeholders. There is a risk in mixing of methodologies across project implementations both from a management and operations perspective and should be carefully considered. The transition to using Agile requires planning and careful management. Organizational change management and communication throughout the adoption of enterprise use of Agile implementation methodologies would improve adoption and project productivity.

Strategic Topic 3-1: Acceptable Implementation Methodologies

3.1.5 PROJECT LIFECYCLE TEMPLATES

Strategic Topic 3-2: Project Life Cycle Templates shows the direction on acceptable templates for Project Life Cycle artifacts.

PROJECT LIFE CYCLE TEMPLATES			TIMELINE		
	Current	2018	2020	2022	2025
Project Identification and Portfolio Management	AHCA IT standards for AHCA IT systems	SEAS Portfolio Management Templates	->		
Project Initiation	FMMIS specific templates"	Vendor equivalent templates acceptable with approval	->		
System Design and Implementation	AHCA IT change process templates	MES Project Life Cycle templates based on XLC templates	->		
Operations and Maintenance	AHCA IT standards for AHCA IT systems	MES Project Life Cycle templates based on XLC templates	->		
Certification Templates	FMMIS specific templates"	CMS MECT templates	->		
Project Management & Monitoring		SEAS templates described in SEAS deliverable P-2 Project Management Standards based on AST templates	->		

ANALYSIS

PROJECT LIFE CYCLE TEMPLATES		TIMELINE				
		Current	2018	2020	2022	2025
The preference is to use the CMS or AST provided templates to simplify certification review or project management and oversight reviews. Large vendors are likely to have templates for system development artifacts based on the vendor specific methodologies. The preference is to use the CMS format templates as opposed to vendor proprietary templates to improve reuse across vendors and across states. The approval to use vendor-specific templates would be on an exception basis.						

Strategic Topic 3-2: Project Life Cycle Templates

3.2   ALIGNMENT WITH SEAS PROJECT MANAGEMENT STANDARDS

The MES Design and Implementation Management Standards align and complement the SEAS Project Management Standards. The MES Design and Implementation Management Standards provide specific standards to follow, activities to perform, and deliverables and documentation to produce during each phase of the MPLC for MES Projects that implement or modify Agency systems, applications, or data. The Agency, SEAS Vendor, and MES Vendors use the SEAS Project Management Standards across *all phases* of MES Projects. The SEAS Project Management Standards provide the guidance to report status, progress, project schedule, and cost, and manage risks, action items, issues, and decisions in a consistent and organized manner that provides understanding of a specific MES Project or the overall MES Program.

The MES Program established project management standards for MES Projects through the MES P-2: SEAS Project Management Standards deliverable. The P-2: SEAS Project Management Standards deliverable provides project management standards initially used to manage the SEAS Project. MES Vendors will use the SEAS Project Management Standards for all other MES Projects managed by the SEAS Vendor. These project management standards also define the integration management for all MES Vendors selected over the course of the MES Program. These SEAS Project Management Standards leverage and align with the Florida's AST IT standards and policy.

The SEAS PMO Standards include:

- Scope Management

- Schedule Management

- Cost Management

- Quality Management

- Resource Management

- Stakeholder Management

- Communication Management

- Document Management

- Performance Management

- Risk Management

- Issues, Action Item, Decision, and Lessons Learned Management

- Organizational Change Management

- Project Closeout Management

The Integration Management processes for MES Vendors include:

- Integrated Risk Management

- Issue, Action Item, Decision, and Lessons Learned Management

- Integrated Master Project Schedule for MES Projects

- Integrated Change Management

- Integrated Organizational Change Management

- Integrated Cost Management

- Integrated Project Status

The MES P-2 SEAS Project Management Standards deliverable describes the status reporting process for MES Projects. The MES Project uses a formal process for status reporting to communicate individual and team project status vertically through the project hierarchy. The Integrated Project Status Reporting Process provides AHCA oversight, Executive Management, Project Management, and the SEAS PMO a view of the progress and status of the MES Project initiation, concept, and planning, requirements and design, development and testing, implementation and operations and maintenance efforts. The MES Project Management and Integration Management standards manage the MES Project through the MPLC phases and includes testing, operations and project closeout activities.

Each MES Vendor will provide the following in a weekly or monthly update as described in P-2 to the SEAS PMO Team:

- Project Status

- Project Summary

- Schedule Major Milestones/Activities

  › Completed

  › Late

  › In-Progress or Future Milestones/ Activities

- Risks (Risk exposure of 15+ or Increasing) or HIGH probability

- Project Issues

- Action Items (High and Medium only)

- Key Decisions or Questions

- Scope Changes

- Additional Observations and Comments

The MES Design and Implementation Management Standards establish the more detailed, technical standards for MES Vendors to follow when implementing or modifying systems, applications or data changes in the integrated environment. MES Vendor design and implementation management activities provide content included in the SEAS Project Management Standards reporting processes. The MES Design and Implementation Standards define work products, documentation, and deliverables tracked and managed in the project plan for each MES Project. In combination, both types of standards provide the technical details to understand and measure the progress of the work reported through the Integrated Project Status Process.

3.3 ALIGNMENT WITH MEDICAID ENTERPRISE CERTIFICATION STANDARDS

The Medicaid Management Information Systems (MMIS) Certification process is the prescribed validation process from CMS for states to request and obtain enhanced Federal Financial Participation (FFP) to develop, implement, operate, and maintain their MMIS.

The Medicaid Enterprise Certification standards for this project are in the MES P-4: Medicaid Enterprise Certification Management Plan, which is available on the MES Projects Repository. Referred to as the MEC Management Plan, its purpose is to provide the overall plan to manage the Certification milestone reviews throughout the Medicaid Enterprise Certification Life Cycle (MECL). Each MES Vendor will be responsible for supporting the Certification process for the associated business component(s).

The MEC Management Plan specifically requires each MES Project Vendor to be responsible for the following:

- Provide applicable documentation of requirements as included in the Certification process for each applicable MES Project

- Provide a Certification Lead who will coordinate with the AHCA, SEAS and IV&V Certification counterparts on all activities related to Certification including understanding the MEC Management Plan

- Support the MECL process for all components which are certified, as described in the current version of the MECT

- Work with AHCA's IV&V Vendor to confirm IV&V Vendor has full access to project artifacts

- Participate and provide support as needed to the MES Project vendors for module Certification activities including participating in planning activities, meetings and other activities as required by CMS

- Complete the State section of the MECT checklist

- Produce Certification artifacts, evidence, and presentation materials

- Provide all the required remediation activities, based on the Certification findings after each milestone review, on a schedule to be approved by CMS and the Agency

- Update the documentation as necessary to support the Certification process and to reflect changes that have been made to the solution during the Certification process

- Adhere to MEC Management Plan

The Medicaid Certification Life Cycle (MECL) Phases align with the XLC Phases the MPLC is based on. As Design and Implementation Management Plans and artifacts are developed, each MES Vendor and the SEAS Certification team will compile the information listed on the MEC Checklists in preparation for the CMS Milestone reviews. The Milestone Reviews in relation to the MECL phases are:

- Initiation, Concept, and Planning Phase

    › Project Initiation Milestone Review (R-1)

- Requirements, Analysis and Design Phase

- Design and Development Phase

- Implementation Phase

    › Operational Milestone Review (R-2)

- Operations and Maintenance Phase

    › Certification Request

    › MMIS Certification Final Review (R-3)

During the Initiation, Concept, and Planning Phase, the SEAS Certification team will work with each MES Vendor to identify the MEC Checklists, artifacts and supporting documentation necessary to comply with a Milestone Review and build those items into the individual project work plan and timeline for the MES module.

SECTION 4   DESIGN AND IMPLEMENTATION STANDARDS

This section describes the process and basis for the MES Design and Implementation Management Standards, the templates for plans to document content that embody those standards, and the design and implementation roles and responsibilities of parties that implement MES Projects.

The Agency, SEAS Vendor, and MES Project Vendors will use these standards throughout the MES Project Life Cycle (MPLC) to produce an integrated system design and implementation.

4.1   PROCESS TO DEFINE DESIGN AND IMPLEMENTATION MANAGEMENT STANDARDS

To define design and implementation management standards, the SEAS Vendor:

- Met with Agency staff to understand and obtain the current standards to keep and which to refine
- Reviewed national standards to verify compliance with mandatory standards
- Reviewed other state's standards to leverage lessons learned in similar projects

These meetings and review of other state and national standards lead to a decision to define the MES Design and Implementation Management Standards using design and implementation management plan templates. There were many existing available templates originating from the Agency (AHCA IT and AHCA Medicaid units), other states, and federal sources. The approach used was to:

- identify the areas of the MPLC where design and implementation plan templates were needed
- select the most appropriate source of design and implementation plan template
- customize each design and implementation management plan template
- load customized templates into the MES Projects Repository and create entries in the MES Technology Standards Reference Guide (TSRG)

This approach provides initial guidance for relevant documentation of activities for each MPLC phase. Using this approach, the plan templates will evolve over the course of the MES Project and the TSRG will expand with increasingly specific standards and guidance for the design and implementation of MES Projects.

This document contains the initial minimum set of management standards used for a MES Project. Each specific standard derives from evaluation of current system specific, Agency, State, CMS, health care industry, and general industry standards.

While there are no mandatory standards by law, there are widely recognized and accepted System Development Life Cycle (SDLC) standards for developing IT systems. CMS standards are an important input because every state Medicaid program must have CMS certify new

systems in accordance with Medicaid Enterprise Certification Toolkit (MECT) 2.2 Guidance to obtain or maintain enhanced federal matching funds to support the system.

4.1.1 BASIS FOR MES DESIGN AND IMPLEMENTATION STANDARDS

The SEAS Vendor reviewed current standards in place at the Agency, national standards, and the State of Tennessee's Medicaid Enterprise standards for this deliverable. After analysis and comparison of the standards, the SEAS Vendor selected the standard or a combination of standards that would guide the development of each design and implementation management plan template's language.

- Current Agency Standards

  › For an internal IT perspective, AHCA IT uses its Information Systems Development Methodology (ISDM). This is a Microsoft suite of services for managing the SDLC for IT projects.

  › For Medicaid-specific perspective, Medicaid Fiscal Agent Operations (MFAO), the current Medicaid fiscal agent contract management bureau, has a Project Management Office Operational Procedures Manual that outlines the process and templates required for the current fiscal agent.

  › For the MES Project perspective and for determining any overlap in standards, the SEAS Vendor has established P-2: SEAS Project Management Standards. The Interim PMO – Scope Change Management Plan defines the Integrated Change Control Process used for MES Projects.

- National Standards

  › For a Certification perspective, CMS provides the MECT 2.2 Guidelines used to certify Medicaid Management Information Systems (MMIS) and to authorize 90% federal funds share for the development and implementation of new systems and to authorize 75% federal funds share for on-going operations throughout the life of the system contract.

  › For the CMS SDLC perspective, CMS provides the eXpedited Life Cycle documentation to complement and support the Certification process and bring formal structure to the SDLC process for IT systems funded with federal award funds.

  › For Disaster Recovery perspective, National Institute of Standards and Technology (NIST) provides a comprehensive plan for maintaining operations for government IT projects in Special Publication 800-34, *Contingency Planning Guide for Federal Information Systems*.

- Other States

  › For another state's perspective, the Tennessee Technical Advisory Services procurement language outlined vendor requirements for design and implementation standards in a project like the Florida MES Program. Florida modeled its Design and Implementation Management Standards plan list from the Tennessee procurement document and selected it for additional review and comparison with national and Florida-specific standards. While the projects share some similarities, the analysis considered that the Tennessee version of Interchange differs from the Architecture used in the Florida MMIS.

4.2   DESIGN AND IMPLEMENTATION ARTIFACTS

During the MES Project Life Cycle, MES Projects produce project artifacts during each MPLC phase to improve the quality and consistency of MES Project system implementations. The MPLC uses the CMS XLC artifact table to specify project artifact standards for system development phases. Unless a MPLC artifact has been defined, the CMS XLC artifact templates are the default format for artifacts produced by MES Projects throughout the MPLC.

Over the course of the MES Program, the MPLC Design and Implementation artifacts are likely to evolve. The Agency and SEAS Vendor may define additional custom plans and or project specific artifacts. The Agency and SEAS Vendor also may customize artifact templates to reflect updates in XLC templates, AST templates, MPLC processes or other design and implementation artifacts content updates.

4.2.1   STANDARD XLC PROJECT ARTIFACTS

MES Projects will produce the artifacts specified in the XLC Project Artifact Table that are applicable for the specific MES Project. The XLC artifacts show the life cycle phases that MES Projects are to create, update, and finalize artifacts.

Below is a link to a CMS-provided table of CMS XLC phases, reviews associated with each phase, and the standard artifacts produced in each phase. The table shows the maturity of each artifact at a specific phase. This table includes project management, security, and system development artifacts. The project management related artifacts shown are only for reference purposes. If a CMS template exists for a specific artifact, there is a link to the XLC template on the CMS website.

[XLC Artifact Table](#)

4.2.2   MES PROJECT DEFINED DESIGN AND IMPLEMENTATION PLANS

In addition to the artifacts in the XLC Project Artifact Table, MES Projects will also produce or adopt MPLC design and implementation plan artifacts. The MPLC design and implementation plans are project-defined artifacts from the perspective of the XLC and the XLC Project Plan Agreement. The MPLC design and implementation plans provide guidance on the approach to perform activities that occur during system development or operations and maintenance phases.

This iteration of the MES Design and Implementation Management Standards defines twelve customized MPLC design and implementation management plans. For each plan, there is a separate document in the form of a template to provide MES Project Vendors guidance on the content to include and format of each plan.

Exhibit 4-4: Management Plan Alignment to Standards show the MES Project Design and Implementation Plans, the primary basis and source of content for each design and implementation plan template and the name of the equivalent MPLC (XLC) artifact.

DESIGN AND IMPLEMENTATION MANAGEMENT PLAN	PLAN CONTENT SOURCE STANDARD ALIGNMENT	MPLC (XLC) ARTIFACT NAME
Business Process and Rules Management Plan	FMMIS Operational Procedure Guide	
Requirements Management Plan	CMS XLC	Requirements Document
Systems Impact Analysis Management Plan	Tennessee, Project Management Office (PMO) Design and Implementation Management Standards	
Configuration Management Plan	CMS XLC	
System Change Management Plan	MES P-2: SEAS Project Management Standards, Interim PMO – Scope Change Management Plan	
Testing Management Plan	MECT 2.2 Certification Guidelines and CMS XLC	Test Plan
Software Problem Resolution Standards and Procedures Plan	CMS XLC	
Integrated System Implementation Management Plan	CMS XLC	Implementation Plan
Integrated Program Operations and Maintenance Planning/Deployment Plan	CMS XLC	Operations and Maintenance Manual
Post-Implementation Evaluation Plan	CMS XLC	Post-Implementation Report
Quality Management Plan	MES P-2 Project Management Standard and CMS XLC	
Disaster Recovery Plan	NIST Special Publication 800-34, *Contingency Planning Guide for Federal Information Systems*	Contingency Plan

Exhibit 4-4: Management Plan Alignment to Standards

4.2.2.1 TEMPLATES FOR DESIGN AND IMPLEMENTATION MANAGEMENT STANDARDS PLANS

The following is a description of each design and implementation management plan template that provides standards for the MES Project.

Attachment A – L in the Appendix of this document provides links to Design and Implementation Management Plan template locations on the MES Projects Repository.

4.2.2.1.1 BUSINESS PROCESS AND RULES MANAGEMENT PLAN

The Business Process and Rules Management Plan defines the industry and/or Vendor standards for the Program business process and rules management framework, the standards for the definition of the rules, and the technologies used to deploy and maintain business processes and business rules.

4.2.2.1.2 REQUIREMENTS MANAGEMENT PLAN

This Integrated System Requirements Management (RM) Plan describes the system requirements, including the vision, global design requirements, and business requirements for guidance and use during the development of the project.

4.2.2.1.3 SYSTEMS IMPACT ANALYSIS MANAGEMENT PLAN INCLUDING SYSTEM INTERFACE/INTEGRATION, SYSTEM CAPACITY, AND SYSTEM PERFORMANCE/ AVAILABILITY

The Systems Impact Analysis Management Plan communicates all possible inputs and outputs from the system for all potential actions whether the inputs and outputs are internal to the system or transparent to system users. This plan helps achieve compatibility between system segments and components.

4.2.2.1.4 CONFIGURATION MANAGEMENT PLAN

The Configuration Management (CM) Plan establishes the technical and administrative direction and surveillance for the management of configuration items (i.e., software, hardware, and documentation) associated with the MES Project that are to be placed under configuration control.

4.2.2.1.5 SYSTEM CHANGE MANAGEMENT PLAN

The System Change Management Plan defines the approach, administrative procedures, roles, and responsibilities for submitting, evaluating, coordinating, approving, or disapproving system and technical changes to baselined configuration items for a project. The Plan will focus on the identification of system changes and will use the Integrated Scope Change Control Process defined in the Interim PMO – Scope Change Management Plan to submit, evaluate, and coordinate approval or disapprovals of system or technical changes.

4.2.2.1.6 TESTING MANAGEMENT PLAN

The Testing Management Plan describes the overall technical and management approach, resources, and schedule for all intended test activities associated with development, validation, implementation, and operational testing.

4.2.2.1.7 SOFTWARE PROBLEM RESOLUTION STANDARDS AND PROCEDURES PLAN

The Software Problem Resolution (SPR) Standards and Procedures Plan describes the approach for continued system development process problem resolution and improvement during the life cycle of the project. The document identifies the specific actions to correct or improve the software process and outlines the plans for implementing those actions.

4.2.2.1.8 INTEGRATED SYSTEM IMPLEMENTATION PLAN

The Integrated System Implementation Management Plan (IM Plan) describes the installation, deployment, and transition of the automated system/application or IT solution to an operational state.

4.2.2.1.9 INTEGRATED PROGRAM OPERATIONS AND MAINTENANCE PLANNING/DEPLOYMENT PLAN INCLUDING TURNOVER STANDARDS

The Integrated Program Operations and Maintenance Planning/Deployment Plan (O&M Plan) is the guide for those who maintain, support, or use the system in a day-to-day operations environment.

4.2.2.1.10 POST-IMPLEMENTATION EVALUATION PLAN

The Post-Implementation Evaluation Plan is an internal assessment by the design and implementation team to determine if the system is implemented and operating as designed. It also represents the official transfer of responsibility to the team tasked with operations monitoring of periodic metrics reporting for the new system.

4.2.2.1.11 QUALITY MANAGEMENT PLAN

The Quality Management Plan documents the necessary information to manage quality during the life cycle of the project. It defines the project's quality policies, procedures, areas of application and associated criteria, and roles and responsibilities.

4.2.2.1.12 DISASTER RECOVERY PLAN

The Disaster Recovery Plan describes the process or set of procedures to recover and protect the MES in the event of a disaster. Specifically, the plan will describe the backup site or failover plan, the testing schedule and any business continuity plans.

4.2.2.2 MPLC DESIGN AND IMPLEMENTATION MANAGEMENT PLANS BY MPLC PHASE

The MPLC design and implementation management plan artifacts follow the same process as XLC defined artifacts. Each design and implementation management plan artifact maps to MPLC phases and can be implemented as a preliminary, interim, baseline, or final deliverable.

Some of the MPLC Design and Implementation Management Plans defined in this document are standard defined artifacts of the MPLC (based on the XLC).

Exhibit 4-5: MPLC Design and Implementation Plan Table shows the MES Project design and Implementation plan artifacts produced for MES Projects, if applicable. This table shows plans that are the equivalent of standard defined MPLC artifacts and those artifacts that are considered project specific additions to the MPLC (XLC). For MPLC Design and Implementation Plans that are standard MPLC (XLC) artifacts, the standard MPLC (XLC) name is shown in parentheses.

PHASES		Initiation	Concept	Planning	Requirements Analysis	Design	Development	Testing	Implementation	O&M*	Disposition
ARTIFACTS/ INFORMATION	**REVIEWS**	AR	ISR	PBR	RR	PDR DDR	ERR1 (VRR)	ERR2 (IRR) ERR (PRR)	ORR	PIR, AOA	DR
Plans that are Standard MPLS (XLC) Artifacts											
Requirements Management Plan (Requirements Document)			P	I	B						
Testing Management Plan (Test Plan)					P	I	B				
Integrated System Implementation Management Plan (Implementation Plan)							P	I	F		
Integrated Program Operations and Maintenance Planning/Deployment Plan (Operations and Maintenance Manual)							P	I	I	F	
Post-Implementation Evaluation Plan (Post-Implementation Report)										P	F	
Disaster Recovery Plan (Contingency Plan)						P	I	I	I	F	
Plans that are Additions to MPLC (XLC) or Project Defined Artifacts											
Business Process and Rules Management Plan					P	I	F				
Systems Impact Analysis Management Plan					P	I	I	F			
Configuration Management Plan					P	I	I	F			

PHASES	Initiation	Concept	Planning	Requirements Analysis	Design	Development	Testing	Implementation	O&M*	Disposition
System Change Management Plan					P	I	I	F		
Software Problem Resolution Standards and Procedures Plan							P	I	F	
Quality Management Plan								F		

Project Management Artifacts	Baseline (B) Final (F) Interim (I) Preliminary (P) Update Yearly (U)	**Reviews and Artifacts are completed/conducted per the Project Process Agreement**
Security Artifacts		
Security Information from Tasks		
Systems Development Artifacts		

AR	Architecture Review	ERR - Environment Readiness Review
ISR	Investment Selection Review	(Validation, Implementation, Production)
PBR	Project Baseline Review	ORR - Operational Readiness Review
RR	Requirements Review	PIR - Post Implementation Review
PDR	Preliminary Design Review	AOA - Annual Operational Analysis
DDR	Detailed Design Review	DR - Disposition Review

Exhibit 4-5: MPLC Design and Implementation Plan Table

4.2.2.3 MPLC DESIGN AND IMPLEMENTATION PLAN ROLES AND RESPONSIBILITIES FRAMEWORK

Exhibit 4-6: Roles and Responsibilities Framework defines the roles of Agency staff, SEAS staff, and MES Vendor(s) to perform design and implementation activities following contract award of a MES Project.

MPLC DESIGN AND IMPLEMENTATION PLAN TEMPLATES		ROLES AND RESPONSIBILITIES DURING INITIAL IMPLEMENTATION OF MES PROJECTS				
		AHCA MES TEAM	IV&V VENDOR	SEAS VENDOR	IS/IP VENDOR	MES VENDORS
1	Business Analysis Plan	5/23/2018 AHCA determined the Business Analysis Plan is not needed as a standalone plan but is information that is gathered as part of the next 3 plans. A template was not developed for this plan.				
2	Business Process and Rules Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
3	Requirements Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
4	Systems Impact Analysis Management Plan including system interface/integration, system capacity, and system performance/availability	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
5	Configuration Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
6	System Change Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
7	Testing Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan

MPLC Design and Implementation Plan Templates		ROLES AND RESPONSIBILITIES DURING INITIAL IMPLEMENTATION OF MES PROJECTS				
		AHCA MES Team	IV&V Vendor	SEAS Vendor	IS/IP Vendor	MES Vendors
8	Software Problem Resolution Standards and Procedures Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
9	Integrated System Implementation Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
10	Integrated Program Operations and Maintenance Planning/Deployment Plan including Turnover Standards	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
11	Post-Implementation Evaluation Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Prepare Post Implementation Evaluation Plan for each MES Vendor	• No Action Required on IS/IP Plan • Work collaboratively with MES Vendors	• Provide Input and Confirm Findings and Action Items
12	Quality Management Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan
13	Disaster Recovery Plan	Review and Approve	• Review MES Vendor Plans and Provide Comments to AHCA	• Work collaboratively with MES Vendors to prepare plans	• Prepare IS/IP Plan • Work collaboratively with MES Vendors	• Prepare plan

Exhibit 4-6: Roles and Responsibilities Framework

4.2.3 MES Project Life Cycle Artifacts

The following link is to the most current version of the MES Project Life Cycle Artifact Table stored on the MES Projects Repository.

[MES Project Life Cycle Artifacts](#)

The table depicts the relevant MPLC specific artifact names, artifact descriptions, link to templates, and links to samples, as available. This list combines XLC artifacts, AST artifacts and MES Project specific artifacts.

Several links to sample artifacts on the CMS XLC templates website are not working. CMS XLC artifacts template links that are invalid are indicated by "n/a".

Note: This list includes XLC artifacts for project management functions of the XLC Project Life Cycle described in the MES P-2: SEAS Project Management Standards deliverable. This iteration of the deliverable has not populated links to all AST templates in the domain of project management

4.2.4 Design and Implementation Management Reviews

The strategy to perform reviews of MES Project deliverables and artifacts is to perform MPLC phase specific reviews that align with CMS guidance of XLC phase specific reviews. The MPLC uses the AST Risk and Complexity as opposed to XLC complexity levels for each MES Project to determine the review appropriate to each MES Project. The AST Project Risk and Complexity Levels align closely with the XLC Complexity levels. Note there are four AST Risk and Complexity levels and three XLC Complexity levels. The review process will evaluate relevant artifacts at a MPLC phase review point, if relevant for the specific MES Project. This approach provides a balance that allows timely reviews and feedback to the MES Project without burdening the MES Project with distracting review overhead and administration.

4.2.5 Project Process Agreement

MES Project Life Cycle phase reviews evaluate the relevant artifacts produced by a project based on the Project Process Agreement defined at project initiation.

The Project Process Agreement (PPA) is a key artifact in the eXpedited Life Cycle (XLC) that documents the agreement between the key stakeholders regarding which reviews will be conducted for the project, which artifacts are appropriate, and which tests are necessary.

The PPA contains a complexity worksheet, a list of artifacts, a list of reviews, a list of tests, and a signature sheet. The signature sheet includes the selected items from each list. The Agency provides the PPA to a vendor as part of a procurement request. As a proposal input, the PPA helps scope the expected work and timeframe for completion.

4.2.6 MES PROJECT REVIEW FRAMEWORK

There are many MES Vendors involved with project management, standards compliance, review, oversight, or certification responsibilities. To minimize overhead to MES Projects, the MES Project reviews will use an integrated project team to perform each phase review. The integrated project team may consist of members representing the interest of the MES Project Vendor, Agency, SEAS Vendor, IV&V Vendor, IS/IP Vendor, EDW Vendor, AST and CMS Certification Team. A goal is to consolidate requests for information, discussion of issues and feedback to the project team considering the review responsibilities of different participants. The SEAS Vendor will be the coordination point to interact with the MES Project team and attempt to resolve conflicting assessment of status, compliance, and recommendations.

Exhibit **4-7**: MPLC Review Framework shows MES Project reviews by MPLC phase for MES Projects of different AST Risk and Complexity levels. This diagram also includes mapping of CMS certification process reviews and AST Project Management and Oversight Review phases to the MPLC phases.
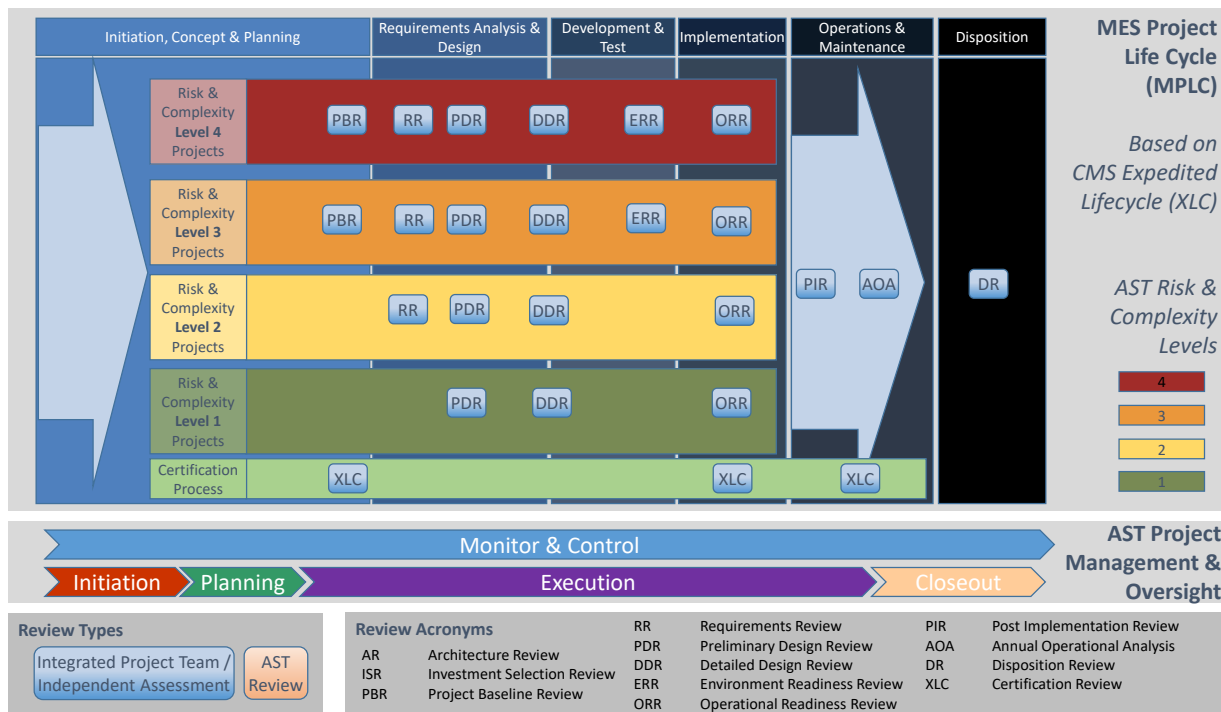
Exhibit 4-7: MPLC Review Framework

4.2.6.1 CMS XLC REVIEW FRAMEWORK

The MPLC Review Framework will use the review definitions and templates aligned with the CMS XLC Review guidance.

Below is a link to the CMS XLC Review and Templates web page.

XLC Reviews & Templates

4.2.6.2 MPLC REVIEW FRAMEWORK TEMPLATE INVENTORY

Exhibit 4-8: MPLC Review Artifact Table lists each review type, a review description (primarily for XLC review descriptions) and links to relevant templates or samples.

CMS provides a single XLC consolidated gate review template in PowerPoint format that has content that can be used for any of the review types listed in the table. Below is the link to the CMS XLC Consolidated Gate Review template:

CMS XLC Consolidated Gate Review Template

Subsequent updates to this deliverable will provide links to MPLC specific templates and sample references.

ID	Review Type	Description	MPLC Specific Template	AST Template	XLC Template	Link to Sample(s)
AR	Architecture Review	Determine whether the proposed project potentially duplicates, interferes, contradicts or can leverage another investment that already exists, is proposed, under development, or planned for near-term disposition. The business need is assessed to determine if it is sound and conforms to the MES Enterprise Architecture.			See XLC Review Link Above	
ISR	Investment Selection Review	Determine if it is sound, viable, and worthy of funding, support and inclusion in the MES Portfolio. The business need and objectives are reviewed to ensure the effort supports Agency's overall mission and objectives and will not comprise initiatives on the horizon. This is an outward focused review designed to				

ID	Review Type	Description	MPLC Specific Template	AST Template	XLC Template	Link to Sample(s)
		ensure funding and approval to proceed from senior leadership.				
PBR	Project Baseline Review	Obtain management approval that the scope, cost and schedule that have been established for the project are adequately documented and that the project management strategy is appropriate for moving the project forward in the life cycle. The PBR includes review of the budget, risk, and user requirements for the investment; emphasis should be on the total cost of ownership and not just development or acquisition costs.				
RR	Requirements Review	Verify that the requirements are complete, accurate, consistent and problem-free; evaluate the responsiveness to the business requirements; ensure that the requirements are a suitable basis for subsequent design activities; ensure traceability between the business and system requirements; and affirm final agreement regarding the content of the Requirements Document by the Business Owner.				
PDR	Preliminary Design Review	Verify the preliminary design satisfies the functional and nonfunctional requirements and is in conformance with the MES Technical architecture; determine technical solution's completeness and consistency with MES standards; raise and resolve any technical and/or project-related issues, to identify and mitigate project, technical, security, and/or business risks affecting continued detailed design and subsequent development, testing, implementation, and operations and maintenance activities.			See XLC Review Link Above	
DDR	Detail Design Review	Verify the final design satisfies the functional and nonfunctional requirements and is in conformance with MES's			See XLC Review	

ID	Review Type	Description	MPLC Specific Template	AST Template	XLC Template	Link to Sample(s)
		Technical Architecture; determine technical solution's completeness and consistency with MES standards; raise and resolve any technical and/or project-related issues, to identify and mitigate project, technical, security, and/or business risks affecting continued detailed design and subsequent development, testing, implementation, and operations and maintenance activities.			Link Above	
ERR	Environment Readiness Review	The ERR is a representation of three distinct reviews: Validation, Implementation, and Production. These reviews are needed to enter the various MES environments to test the solution and its contingency operations. Not all solutions will go through all environments. Specific requirements for running in each environment are provided by the environment's owner.				
VRR	Validation Readiness Review	Ensure the system/application completed thorough Development Testing and is ready for turnover to the formal, controlled test environment for Validation testing.				
IRR	Implementation Readiness Review	Ensure the system/application completed thorough Integration Testing and is ready for turnover to the formal, controlled test environment for Production Readiness.				
PRR	Production Readiness Review	Ensure that the operational staff has the appropriate startup and shutdown scripts, accurate application architecture documentation, application validation procedures, and valid contact information to ensure operability of infrastructure applications.				
ORR	Operational Readiness Review	Ensure the system/application completed its implementation processes according to plan and that it is ready for turnover to the Operations & Maintenance team and			See XLC Review	

ID	Review Type	Description	MPLC Specific Template	AST Template	XLC Template	Link to Sample(s)
		operational release into the Production environment.			Link Above	
PIR	Post Implementation Review	The purpose of the PIR is twofold: (1) To ascertain the degree of success from the project; the extent to which it met its objectives, delivered planned levels of performance, and addressed the specific requirements as originally defined; (2) To enable the team, and future teams, to learn lessons from the project to improve future MES work and solutions. In that context, the PIR examines whether the team achieved the results it planned for, what those results actually were, and what caused the results to be different from those planned for (if they are different).			See XLC Review Link Above	
AOA	Annual Operational Analysis	Evaluate system performance, user satisfaction with the system, adaptability to changing business needs, and new technologies that might improve the system. This review is diagnostic in nature and can lead to development or maintenance activities. Ultimately AOA determines whether the IT Investment should continue, be modified or terminated.				
DR	Disposition Review	Ensure the IT investment has been completely and appropriately transitioned /disposed thereby ending the life cycle of the IT project.			See XLC Review Link Above	

Exhibit 4-8: MPLC Review Artifact Table

4.2.6.3   MPLC REVIEW FOCUS

The focus of MPLC reviews is to:

- Evaluate MPLC artifacts produced during the MPLC phase

- Confirm development and implementation requirements are being addressed

- Confirm compliance with MES standards

- Provide technology guidance and support to MES Projects

- Confirm and update the MES Project business case

A part of each review will be to provide updated information that allows the MES Portfolio Management decision making. Information updates from reviews could lead to overall Program management decisions about one or more MES Projects. The Agency expects that findings from reviews could cause decisions for specific MES Projects to be paused, cancelled, resized, re-scoped, expanded, extended or have other changes to optimize benefits to the Agency and its stakeholders. For example, if a review identifies that expected project benefits will not occur, this information could lead the Agency to decisions to utilize resources for other projects.

SECTION 5 APPLICABILITY DECISION TREE

Because each MES Project may vary in the scope of services, MES Vendor, system implementation methodology and system solution, not all MES Design and Implementation Management artifacts and standards are relevant to every MES Project. This section provides a description of the decision tree analysis process, tool, and content to determine the applicable design and implementation management plan artifacts and standards that are relevant for each MES Project.

5.1 DECISION TREE ANALYSIS PROCESS

The SEAS Vendor performs the decision tree analysis process to determine which design and implementation management artifacts and standards are applicable to a MES Project at project initiation. If a project change order causes the project scope or other factors used in the decision tree to change, the SEAS Vendor will reassess the artifacts and standards applicable to the MES Project. The change order process described in Section 4 of the P-2: SEAS Project Management Standards documents the process of changes identified through reassessment.

The factors that influence the applicability of design and implementation management standards are:

- Size and Timing of Net Project Outcomes and Benefits
- Risk and Complexity Level
- Scope of Services Provided
- System Implementation Methodology
- System Solution Type

The Project Process Agreement documents decisions on artifacts applicable to an MES Project for each MES Project. The PPA lists the standard XLC artifacts and MPLC project specific design and implementation plans and artifacts. The PPA includes potential entries for the following types of project artifacts

- Project Management Artifacts
- Security Artifacts
- Security Information from Tasks – This is an XLC category indicating security information that results from project tasks and creation of other artifacts
- Systems Development Artifacts

For each artifact listed on the PPA, the Agency and MES Project Team specifies the applicability of the particular artifact. Applicable choices are:

- Provide (New)

- Provide (update)
- Waive
- Combine (with one or more other artifacts)

The applicable artifacts based on the PPA become inputs to the MES Project Reviews described above in Section 4.2.4 Design and Implementation Management Reviews.

5.2 DECISION TREE ANALYSIS TOOL

The MES Project will use a spreadsheet to document the MES Design and Implementation Management Standards Applicability Decision Tree criteria. Attachment N, Design and Implementation Management Standards Applicability Tree, contains a copy of the spreadsheet.

The applicability decision analysis process uses the following applicability values:

- M – Mandatory to be produced
- R - Recommended
- Blank – May be produced based on project specific factors
- N – Should not be produced

The applicability decision analysis process first evaluates the column labeled "All Projects". Artifacts with a value of M are mandatory for all projects. If there is a blank in the "All Projects" column, then the project should evaluate values corresponding to each applicability factor. The artifact values associated with the applicability factor value of the project provide guidance on the applicability of that artifact. If there is conflicting guidance, the default applicability is to the higher applicability value. For example, if one applicability factor indicated "M" and another "N", the default position would be to produce the artifact.

These default values are a starting point for the Project Process Artifact (PPA). Through the PPA process, specific artifacts could be combined, waived, or developed based on project specific factors.

5.3 DECISION TREE ANALYSIS CONTENT

Key
M – Mandatory to be produced
R - Recommended
Blank – May be produced based on project specific factors
N – Should not be produced

Standard MPLC (XLC) Artifacts

ARTIFACTS/ INFORMATION	DOMAIN	All Projects	Project Cost >$10M	Project Cost $5-10M	Project Cost $500K-5M	Project Cost < $500K	Project Net Benefit >$50M	Project Net Benefit >$10-50M	Project Net Benefit >$1-10M	Project Net Benefit <$1M	Implementation Timeframe <6 months	Implementation Timeframe 7-18 months	Implementation Timeframe >18 months	AST Level 4	AST Level 3	AST Level 2	AST Level 1	Custom	Transfer	Platform as a Service	COTS	Software as a Service	Outsourced Processing	Agile	Waterfall	Iterative	DevOps	Requirements	Design	Data Design	Configuration / Development	Interfaces	Testing	Conversion	Organizational Change Management	User Training	Implementation	Application Management	Operations	Hosting
System Security Category	Security	M																																						
Privacy Impact Assessment	Security	M																																						
System Security Plan	Security																																							
Business Risk Assessment	Security	M																																						
Information Security Risk Assessment	Security	M																																						
Information System Description	Security																																							
Security Requirements	Security	M																																						
Monitoring Strategy	Security																																							
Security Control Description	Security																																							
Software Assurance Misuse Cases	Security																																							
Contingency Plan	Security	M																																						
Contingency Plan Test	Security																																					M	M
Security Control Assessment	Security																																							
Authorization Package	Security																																							
Plan of Action & Milestones	Security																																							
CMS CIO-Issued Authority to Operate (ATO)	Security																																					M	
Security Monitoring Reports	Security																																							
IT Intake Request Form	System Development	M																																						
Enterprise Architecture Analysis Artifacts	System Development																																							
Business Case	System Development	M												M	M																									
Requirements Management Plan (XLC: Requirements Document)	System Development	M																																						
High-Level Technical Design	System Development	M																																						
Section 508 Assessment Package	System Development																																							
Logical Data Model	System Development																														M									
Release Plan	System Development													M																								M		
System of Records Notice	System Development																																							
Testing Management Plan (XLC: Test Plan)	System Development	M																																						
System Design Document	System Development																						N																	
Database Design Document	System Development																					N	N								M									
Physical Database/Model	System Development																														M									
Interface Control Document	System Development																																M							
Data Use Agreement	System Development																																M							
Test Case Specification	System Development																																	M						
Data Conversion Plan	System Development																																		M					
Computer Match Agreement/ Interagency Agreement	System Development																																M							
Integrated System Implementation Management Plan (XLC: Implementation Plan)	System Development	M																																						
User Manual	System Development																																				M			
Integrated Program Operations & Maintenance Planning/Deployment Plan (XLC: Operations & Maintenance Manual)	System Development																																							M	M
Performance Test Plan and Results Template	System Development																																	M						
Business Product/Code	System Development																																M								
Version Description Document	System Development											M																											M		
Training Plan	System Development																																				M				
Test Summary Report	System Development	M																																						
Training Artifacts	System Development																																				M				
System Disposition Plan	System Development																																							
Post Implementation Evaluation Plan (XLC: Post-Implementation Report)	System Development	M												M	M	M																								
Annual Operational Analysis Report	System Development		M	M	M																																		M	M

Project Specific (non-XLC) Artifacts

ARTIFACTS/ INFORMATION	DOMAIN	All Projects	Project Cost >$10M	Project Cost $5-10M	Project Cost $500K-5M	Project Cost < $500K	Project Net Benefit >$50M	Project Net Benefit >$10-50M	Project Net Benefit >$1-10M	Project Net Benefit <$1M	Implementation Timeframe <6 months	Implementation Timeframe 7-18 months	Implementation Timeframe >18 months	AST Level 4	AST Level 3	AST Level 2	AST Level 1	Custom	Transfer	Platform as a Service	COTS	Software as a Service	Outsourced Processing	Agile	Waterfall	Iterative	DevOps	Requirements	Design	Data Design	Configuration / Development	Interfaces	Testing	Conversion	Organizational Change Management	User Training	Implementation	Application Management	Operations	Hosting
Business Process and Rules Management Plan	System Development																											N	M											
Systems Impact Analysis Management Plan	System Development																					N	N								M									
Configuration Management Plan	System Development																					N	N																M	M	M
Change Management Plan	System Development																																						M	M	M
Software Problem Resolution Standards and Procedures Plan	System Development																																						M	M	M
Quality Management Plan	System Development		M	M	M		M	M	M					M	M																									
Turnover Plan	System Development																																						M	M	M

Exhibit 5-1: Decision Tree Applicability **Content** provides the decision analysis content to guide projects in determining which artifacts are applicable for MES Projects.

In the current decision tree content, some applicability factor values do not currently have artifact recommendations for any listed artifacts. These are included to support the definition of additional artifact types (e.g. methodology specific artifact types).

Key
M – Mandatory to be produced
R - Recommended
Blank – May be produced based on project specific factors
N – Should not be produced

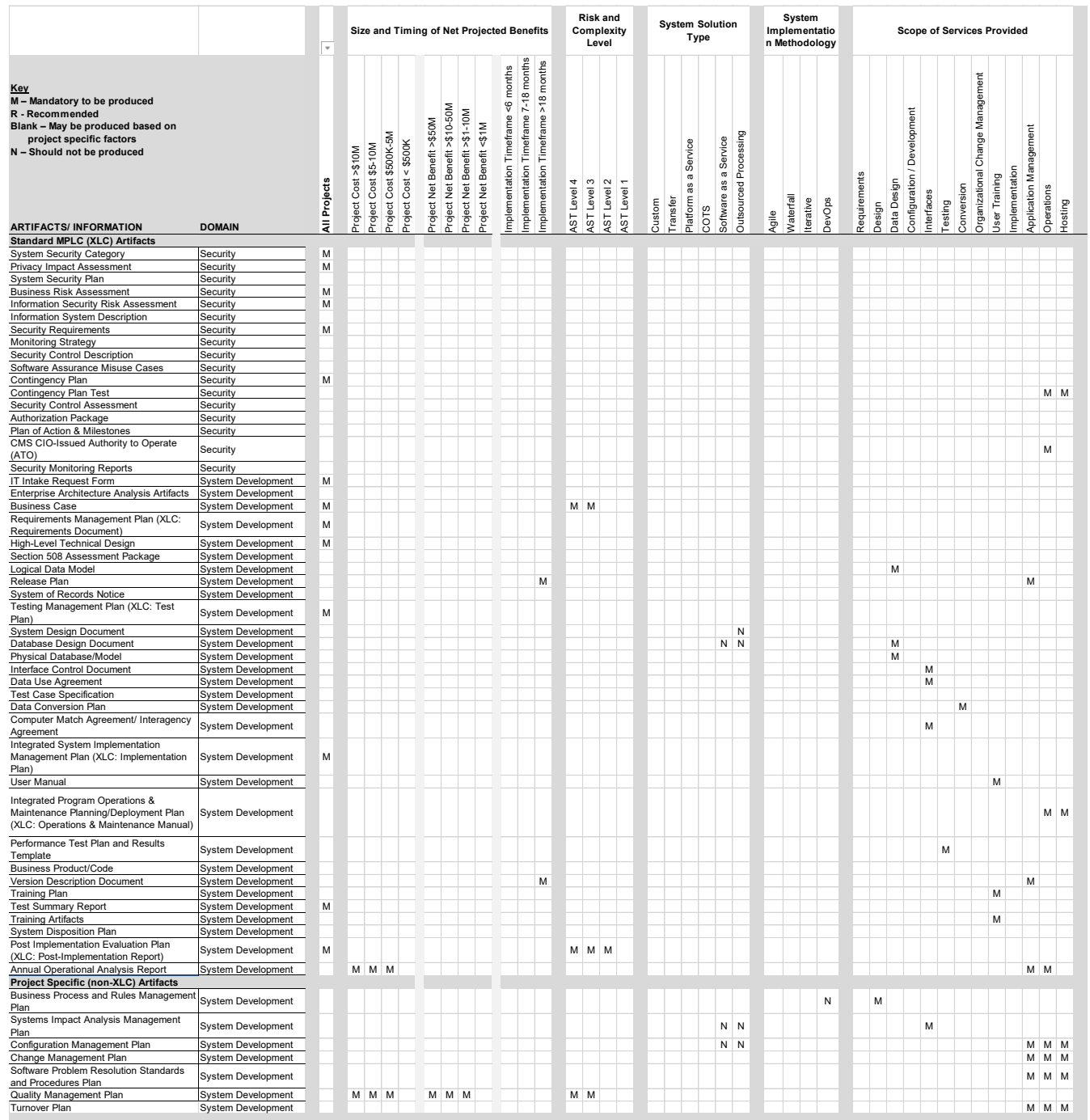| ARTIFACTS/ INFORMATION	DOMAIN	All Projects	Project Cost >$10M	Project Cost $5-10M	Project Cost $500K-5M	Project Cost < $500K	Net Benefit >$50M	Net Benefit >$10-50M	Net Benefit >$1-10M	Net Benefit <$1M	Impl Timeframe <6 months	Impl Timeframe 7-18 months	Impl Timeframe >18 months	AST Level 4	AST Level 3	AST Level 2	AST Level 1	Custom	Transfer	Platform as a Service	COTS	Software as a Service	Outsourced Processing	Agile	Waterfall	Iterative	DevOps	Requirements	Design	Data Design	Configuration / Development	Interfaces	Testing	Conversion	Organizational Change Management	User Training	Implementation	Application Management	Operations	Hosting
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Software Assurance Misuse Cases	Security																																							
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Contingency Plan Test	Security																																					M	M
Security Control Assessment	Security																																							
Authorization Package	Security																																							
Plan of Action & Milestones	Security																																							
CMS CIO-Issued Authority to Operate (ATO)	Security																																						M	
Security Monitoring Reports	Security																																							
IT Intake Request Form	System Development	M																																						
Enterprise Architecture Analysis Artifacts	System Development																																							
Business Case	System Development	M												M	M																									
Requirements Management Plan (XLC: Requirements Document)	System Development	M																																						
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Logical Data Model	System Development																														M										
Release Plan	System Development												M																								M			
System of Records Notice	System Development																																							
Testing Management Plan (XLC: Test Plan)	System Development	M																																						
System Design Document	System Development																						N																	
Database Design Document	System Development																					N	N								M									
Physical Database/Model	System Development																														M									
Interface Control Document	System Development																															M								
Data Use Agreement	System Development																															M								
Test Case Specification	System Development																																M							
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Computer Match Agreement/ Interagency Agreement	System Development																															M								
Integrated System Implementation Management Plan (XLC: Implementation Plan)	System Development	M																																						
User Manual	System Development																																			M				
Integrated Program Operations & Maintenance Planning/Deployment Plan (XLC: Operations & Maintenance Manual)	System Development																																						M	M
Performance Test Plan and Results Template	System Development																																M							
Business Product/Code	System Development																																							
Version Description Document	System Development												M																									M		
Training Plan	System Development																																			M				
Test Summary Report	System Development	M																																						
Training Artifacts	System Development																																			M				
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Post Implementation Evaluation Plan (XLC: Post-Implementation Report)	System Development	M												M	M	M																								
Annual Operational Analysis Report	System Development		M	M	M																																		M	M
Project Specific (non-XLC) Artifacts																																								
Business Process and Rules Management Plan	System Development																											N		M										
Systems Impact Analysis Management Plan	System Development																					N	N									M								
Configuration Management Plan	System Development																					N	N															M	M	M
Change Management Plan	System Development																																					M	M	M
Software Problem Resolution Standards and Procedures Plan	System Development																																					M	M	M
Quality Management Plan	System Development		M	M	M		M	M	M					M	M																									
Turnover Plan	System Development																																					M	M	M

Exhibit 5-1: Decision Tree Applicability Content

5.3.1 MPLC Design and Implementation Plan Applicability

The process to determine which design and implementation management plan standards are relevant is relatively simple as the design and implementation management plan templates are unsophisticated in the initial implementation of this deliverable. The SEAS Vendor will meet with the project manager of the MES Project to review the factors that affect which standards are applicable. Based on the discussion of relevant factors, AHCA, the SEAS Vendor, and MES Vendor Project Manager will agree on the MES Design and Implementation Management Plans that are applicable for the MES Project. The MES Vendor Project Manager will include the activities and milestones in the MES Project work plan in association with the Schedule Management section 3.2.2 of the P-2: SEAS Project Management deliverable. This will provide additional schedule baseline information in the event of a change request or change in the assumptions.

5.3.1.1 Plans required for all projects regardless of scope

Exhibit 5-2: Required MPLC Design and Implementation Plans list the MPLC design and implementation plans that are required for all MES Projects.

T-7 Management Plan Templates		MPLC Phase	Rationale
3	Requirements Management Plan (referred to Requirements Document)	Requirements	A requirements management plan is required regardless of scope of project. One can be adopted or amended from a previous scope of work, but, should be MES project specific in addressing the work.
5	Configuration Management Plan	Development	A configuration management plan is required regardless of scope of project. One can be adopted or amended from a previous scope of work, but, should be MES project specific in addressing the work.
7	Testing Management Plan (referred to as Test Plan)	Test	A testing management plan is required regardless of project scope. One can be adopted or amended from a previous scope of work, but, should be MES project specific in addressing the work.
9	Integrated System Implementation Management Plan (referred to as Implementation Plan)	Operations & Maintenance	A system implementation management plan is required for certification.
11	Post-Implementation Evaluation Plan (referred to as Post-Implementation Report)	Operations & Maintenance	A post-implementation evaluation plan is required for certification.

T-7 MANAGEMENT PLAN TEMPLATES		MPLC PHASE	RATIONALE
12	Quality Management Plan	Test	The quality management plan is required by PMO standards.
13	Disaster Recovery Plan (referred to as Contingency Plan)	Operations & Maintenance	A disaster recovery plan or update to an existing disaster recovery plan is required to accommodate new processing and functionality.

Exhibit 5-2: Required MPLC Design and Implementation Plans

5.3.1.2   PLANS REQUIRED FOR SELECTED MES PROJECTS

Exhibit 5-3: Plans Required for Selected MES Projects lists the MPLC design and implementation plans that are required for selected MES Projects depending on the scope of the specific MES Project. Factors that determine if a plan is required include the phase of work performed, if the project is for an existing system and the specific module functionality. Determination of if an MPLC design and implementation plan is appropriate for a MES project occurs when the PPA is developed.

T-7 MANAGEMENT PLAN TEMPLATES		MPLC PHASE	RATIONALE
2	Business Process and Rules Management Plan	Design	If the project causes a change to a business process, this plan is required.
4	Systems Impact Analysis Management Plan including system interface/integration, system capacity, and system performance/ availability	Design	If the project affects an existing system, this plan is required. If the function is stand alone, this plan is not required.
6	System Change Management Plan	Requirements	If the project affects the roles and responsibilities of people, then a system change management plan is required. Extensions by current vendors can leverage initial plan.
8	Software Problem Resolution Standards and Procedures Plan	Maintenance	If the project adds or changes software support processes, then a software problem resolution standards and procedures plan is required. Extensions by current vendors can leverage initial plan.

T-7 MANAGEMENT PLAN TEMPLATES	MPLC PHASE	RATIONALE
10	Integrated Program Operations and Maintenance Planning/Deployment Plan including Turnover Standards (referred to as Operations and Maintenance Manual)	Maintenance	If the project adds or changes operations and maintenance responsibilities, then an integrated program operations and maintenance planning and deployment plan is required. Extensions by current vendors can leverage initial plan.

Exhibit 5-3: Plans Required for Selected MES Projects

SECTION 6   STANDARDS SUPPORT AND EXPERTISE

The SEAS Vendor will support the use of the Design and Implementation Management Standards by the Agency and MES Vendors for the implementation of MES Projects. To support and provide expertise for the Design and Implementation Management Standards, the SEAS Vendor will:

- Use the technology standards communication, support, compliance, and compliance reporting processes and tools defined for other MES technology domain standards (e.g., Data Management, Technology, etc.)
- Provide technical expertise relevant to the design and implementation management category of technology standards

Using the combination of common technology standards management, communication, assessment, and reporting processes, and providing relevant technical expertise will help the SEAS Vendor support MES Project Vendors and ultimately the Agency implement MES projects to achieve the MES strategic vision.

6.1   STANDARDS SUPPORT – USE OF COMMON TECHNOLOGY STANDARDS PROCESSES

The SEAS Vendor will use the common technology standards processes to define, secure governance approval, maintain, communicate, provide ad hoc support, assess compliance, and report standards compliance to the Agency. Following the processes used for other categories of MES technology domain standards improves consistency, efficiency, understanding, and communication. Specifically, the SEAS Vendor will leverage the processes and procedures in the SEAS T-6: Technology Standards deliverable and in T-6: Technology Standards Attachment E - *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures*. Appendix C - Reference to Other Deliverables contains a link to the referenced document.

6.2   STANDARDS SUPPORT – PROVIDING TECHNICAL EXPERTISE

During each MPLC phase, the SEAS Vendor will provide technical expertise supporting the use of the Design and Implementation Management Standards to help:

- Improve the quality of systems implemented or modified by MES Projects
- Support MES Project Vendors
- Ensure compliance with MES standards and policies
- Achieve project scope and outcomes according to project plan and cost projections
- Improve the interoperability and reuse of systems and services
- Optimize use of Agency, SEAS, IV&V, IS/IP and other MES Vendor resources

The SEAS Vendor will support MES Vendors by providing technical expertise appropriate to each MPLC phase to help the Agency achieve the MES Strategic Vision.

Exhibit 6-1: Design and Implementation SEAS Vendor Standards Support and Expertise shows examples of the types of standards support and technical expertise provided to MES Projects by MPLC Phase.

SEAS VENDOR TECHNICAL EXPERTISE PROVIDED	INITIATION, CONCEPT & PLANNING PHASE	REQUIREMENTS, ANALYSIS & DESIGN PHASE	DEVELOPMENT & TEST PHASE	IMPLEMENTATION PHASE	OPERATIONS & MAINTENANCE PHASE
Review of MES Project design and implementation plans	✓	✓	✓	✓	✓
Analysis of MES Project deliverables and provide recommendations	✓	✓	✓	✓	✓
Analysis of design documentation, scope, activities, and project results, including (Florida Administrative Code IT Security Rule 74-2 compliance).		✓	✓	✓	✓
Participation in JAD, RAD, or other development sessions		✓	✓		✓
Ad hoc oral or written technical expertise as needed	✓	✓	✓	✓	✓

Exhibit 6-1: Design and Implementation SEAS Vendor Standards Support and Expertise

Below is a description and examples of each type of SEAS Vendor-provided standards and technical expertise support:

- Review of MES Project design and implementation plans – Throughout the MPLC the SEAS Vendor will review design and implementation plans. During the planning and requirements phase, these technology reviews focus on achievable solution plans, work planning completeness, reasonable estimates, schedule projections and resource needs and capabilities. During the Design phase, reviews focus on validating the design and assuring the implementation plan reflects the impact of design decisions on later phases. In the development and build phase and the testing phase reviews focus on confirming design, validating schedule progress and quality.

- Analysis of MES Project deliverables and provide recommendations – The SEAS Vendor will provide consistent, technical expertise in reviewing, analyzing and providing recommendations for MES Project work products and deliverables. Analysis of MES Project work products and deliverables includes compliance with and full support of the Medicaid Enterprise Certification Toolkit (MECT 2.2) artifact and documentation requirements.

- Analysis of design documentation, scope, activities, and project results, including (Florida Administrative Code IT Security Rule 74-2 compliance) – The SEAS Vendor reviews documentation of scope, activities and project results throughout the phases of the MPLC. The technical analysis will focus on MES vendor approved designs and changes that may arise or when technical issues occur on MES projects. Throughout the MPLC, the SEAS Vendor provides awareness of MES Vendor actions required for Florida Administrative Code IT Security Rule 74-2 compliance. SEAS vendor analysis of risks, vulnerabilities, and data protection activities occur throughout all phases of the MPLC.

- Participation in Joint Application Design (JAD), Rapid Application Development (RAD), or other development sessions – The SEAS Vendor will be available to participate in MES Vendor development sessions to help clarify design and implementation standards, work through complex development components, or provide other recommendations relevant to the development and build phases of the MPLC.

- Ad hoc oral or written technical expertise as needed – Throughout the phases of the MPLC, the SEAS Vendor provides technical expertise in ad hoc oral or written technical form. Technical experience of the staff that developed the MES standards and that have years of relevant technical implementation experience will be provided in both formal and informal settings using oral or written communication methods.

SECTION 7   IMPLEMENTATION STATUS REPORTING

MES Project implementation status reporting primarily uses the processes defined in the SEAS Deliverable P-2: SEAS Project Management Standards. This deliverable describes the processes for managing the project management and project status reporting processes for MES Projects. Section 3.3.7 Integrated Project Status Reporting of the P-2: SEAS Project Management Standards deliverable explains the process for MES Vendors to report MES Project implementation status. Other sections of the P-2: SEAS Project Management Standards deliverable include other project management processes for managing MES Project Implementation.

The P-2 deliverable processes provide templates and job aids for reporting MES Project implementation activities. MES Project work plans will incorporate the key deliverables and activities related to the MES Design and Implementation Management Standards in each project's work plan. Therefore, reporting of implementation status including progress on MPLC standards will occur in the regular MES Project status reports.

Detailed reporting on MES Project compliance with MES Design and Implementation Management Standards uses the standard process for communicating, providing support, assessing compliance and performing compliance reporting as defined in SEAS Deliverable T-6 Technology Management Standards Attachment E – *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures.* Attachment E to the T-6 deliverable describes the processes that:

- communicate new and modified standards and compliance expectations to stakeholders
- support stakeholders' adherence to standards
- assess stakeholder compliance to standards
- communicate levels of standards compliance to the Agency

The link below connects to the current *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures*, reflecting any updates since the submission of this deliverable.

SEAS Deliverable T-6 Technology Standards Attachment E – Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures

Appendix A – MPLC Design and Implementation Management Templates

Appendix A provides a description and links to Design and Implementation Management templates that are available to MES Projects. During the Requirements, Analysis and Design phase through the Implementation phase of each MES Project Life Cycle, MES Project Vendors produce plans that are deliverables or artifacts of the specific MES Project. The Design and Implementation Management templates outline and organize suggested content, provide vendor guidance and instructions, and include sample information tables for the minimum set of MPLC Design and Implementation plans for a MES Project. The templates align closely with the CMS XLC templates allowing MES Project Vendors and the Agency to reduce the development cost and enable reuse of relevant content across states. MES Program specific customizations from CMS XLC templates help MES Project Vendors produce relevant plans that reflect evaluation of Agency (Medicaid and non-Medicaid), State, CMS, health care industry and general industry standards.

[Attachment A – MPLC Business Process and Rules Management Plan](#)

[Attachment B – MPLC Requirements Management Plan](#)

[Attachment C – MPLC Systems Impact Analysis Management Plan](#)

[Attachment D – MPLC Configuration Management Plan](#)

[Attachment E – MPLC Change Management Plan](#)

[Attachment F – MPLC Testing Management Plan](#)

[Attachment G – MPLC Software Problem Resolution Standards and Procedures Plan](#)

[Attachment H – MPLC Integrated System Implementation Management Plan](#)

[Attachment I – MPLC Integrated Program Operations and Maintenance Planning/Deployment Plan](#)

[Attachment J – MPLC Post Implementation Evaluation Plan](#)

[Attachment K – MPLC Quality Management Plan](#)

[Attachment L – MPLC Disaster Recovery Plan](#)

[Attachment O – MPLC Turnover Plan](#)

Appendix B - Design and Implementation Management Standards Extracts

The Technology Standards Reference Guide (TSRG) is the repository of all MES Technology Standards. The TSRG contains fields and views that allow users to view specific types of standards. The attachment(s) below are extracts from the TSRG of Design and Implementation Management Standards entries.

Attachment M – TSRG Design and Implementation Management Standards

Attachment M – *Technology Standards Reference Guide - Design and Implementation Standards* contains an Excel-format extract of design and implementation management standards from the TSRG on the MES Projects Repository. This file contains content as of the date of deliverable submission.

Attachment N – Design and Implementation Management Standards Applicability Tree

Attachment N – Design and Implementation Management Standards Applicability Tree contains an Excel-format matrix showing which MES Design and Implementation Management Plan Templates are relevant based on MES Project characteristics.

Appendix C - Reference to Other Deliverables

SEAS Deliverable P-2: SEAS Project Management Standards

P-2: SEAS Project Management Standards – provides formats and guidelines for MES Project Vendors to develop consistent Project Management Plans that can support integrated processes developed by the SEAS PMO. This deliverable also describes the process for MES Project status reporting.

SEAS Deliverable T-6 - Technology Standards

T-6: Technology Standards - establishes the MITA compliant Florida Medicaid Technology Standards Reference Guide (TSRG) and Technology Standards Reference Model (TSRM) and describes a maintenance process.

SEAS Deliverable T-6 Technology Standards Attachment B – How to Maintain the TSRG

T-6: Technology Standards Attachment B – *How to Maintain the TSRG* List is a Word document that describes the procedures to maintain content in the Technology Standards Reference Guide content.

SEAS Deliverable T-6 Technology Standards Attachment E – Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures

T-6: Technology Standards Attachment E – *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures* describes the processes to communicate new and modified standards or compliance expectations to stakeholders, support stakeholders' adherence to standards, assess stakeholders' compliance to standards, and communicate levels of standards compliance to the Agency.

Appendix D – External References

CMS XLC Process Overview

Link to a CMS provided overview of the eXpedited Life Cycle (XLC) Process.

CMS XLC Artifacts and Templates

Link to CMS provided web page that describes XLC templates available for use.

XLC Artifact Table

Link to CMS provided table that maps XLC artifacts to XLC phases and reviews.

CMS Project Process Agreement

Link to CMS provided Project Process Agreement (PPA) spreadsheet.

AST Project Management Templates

Link to Florida Agency for State Technology (AST) provided templates. These templates focus on project management and status reporting as opposed to specific artifacts or deliverables produced during the requirements analysis and design phase through the implementation phase of a project.

Overview of Florida Information Technology Project Management and Oversight Standards

Link to a presentation developed by the Florida Agency for State Technology (AST) that explains the project management and oversight review processes for Florida Technology projects.