# AHCA Florida Health Care Connections (FX)

## T-6: Technology Standards

**Version:** 350

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**Author:** The SEAS Vendor

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# Revision History

| DATE | VERSION | DESCRIPTION | AUTHOR |
|---|---|---|---|
| 3/02/2018 | 001 | T-6: Technology Standards initial draft version | Mike Griffiths |
| 3/26/2018 | 002 | T-6: Technology Standards second draft version | Mike Griffiths/Schelley Cassidy |
| 4/11/2018 | 003 | T-6: Technology Standards second draft version | Mike Griffiths/Paul Moore |
| 05/02/2019 | 101 | T-6: Technology Standards annual refresh draft version | Mike Griffiths/Paul Moore/Jon Henderson |
| 6/11/2019 | 102 | T-6: Technology Standards annual refresh draft response | Mike Griffiths |
| 7/18/2019 | 200 | T-6: Technology Standards annual refresh final approval | Carol Williams |
| 1/7/2020 | 201 | T-6: Technology Standards Quarterly refresh draft | Mike Griffiths |
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| 5/13/2020 | 226 | T-6: Technology Standards Quarterly refresh Updates to TSRM and TSRG – Additions of Cherwell, Open API 3.0, CMDB, CMS Interoperability and Patient Access final rule | Joanna Redding Steve Ruszkowski |
| 5/19/2020 | 300 | T-6: Technology Standards quarterly refresh final approval | Palmer White |
| 1/21/2021 | 301 | T-6: Technology Standards Quarterly refresh draft | Steve Ruszkowski |
| 3/1/2021 | 350 | T-6: Technology Standards approved final version | Carol Williams |

Modifications to this artifact must be made in accordance with the FX Artifact Management Standards.

# Quality Review History

| DATE | REVIEWER | COMMENTS |
|---|---|---|
| 3/2/2018 | Sean Gibbs | Quality Assurance Review |
| 4/2/2018 | Sean Gibbs | Quality Assurance Review |
| 4/11/2019 | Mary Lindsay Ryan | Quality Assurance Review |
| 1/6/2020 | Eric Steinkuehler | Quality Assurance Review |
| 12/3/2020 | Carol Williams | QC review |
| | | |

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# SECTION 1 INTRODUCTION

## 1.1 BACKGROUND

The Florida Agency for Health Care Administration (AHCA or Agency) is adapting to the changing landscape of healthcare 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 is complex; it includes services, business processes, data management and processes, technical processes within the Agency, and interconnections and touchpoints with systems necessary for administration of the Florida Medicaid program that reside outside the Agency. The future of the Florida Medicaid Enterprise integration is to allow the Agency to secure services that can interoperate and communicate without relying on a common platform or technology.

The Florida Medicaid Management Information System (FMMIS) has historically been the central system within the Florida Medicaid Enterprise; functioning as the single, integrated system for claims processing and information retrieval. As the Medicaid program has grown more complex, the systems needed to support the Florida Medicaid Enterprise have grown in number and complexity.

The Medicaid Enterprise System (MES) Procurement Project was re-named Florida Health Care Connections (FX) in the summer of 2018. FX is a multi-year transformation to modernize the current Medicaid technology using a modular approach, while simultaneously improving overall Agency functionality and building better connections to other data sources and programs.

## 1.2 PURPOSE

Standardizing the vocabulary and application of technology standards in the implementation and use of technology improves the efficiency, data sharing, and reuse of technology and business processes. This deliverable establishes and populates a framework for a common technology vocabulary and communication of relevant and applicable standards for technology components. The Technology Standards Reference Model (TSRM) is the common technology vocabulary that organizes, and groups related technology components standardizing the names and descriptions of those components. The Technology Standards Reference Guide (TSRG) is a repository of standards relevant to technology components that identifies and prioritizes the relevance of specific technology standards in the enterprise. Together these two components make up the FX technology standards that help technology stakeholders identify opportunities, and implement, operate, and continuously improve the FX System.

## 1.3 SCOPE STATEMENT

The Technology Standards Artifacts defined in this deliverable integrate MITA 3.0, Federal Enterprise Architecture (FEA), Agency, and other standards to provide a more comprehensive open system environment. This approach allows for a more mature framework while maintaining compliance with MITA 3.0.

The initial version of this deliverable focused on the broad standards directly relevant to FX initial procurements. The current deliverable assumes the definition of additional technology components and standards as FX projects' focus shifts to modernization and procurements of other types of technology, expanded enterprise wide participation, and ongoing standards maturation.

## 1.4 Goals and Objectives

Goal 1 – The primary goal of this deliverable is to establish the MITA compliant TSRG and TSRM. This goal will be accomplished by achieving the following objective:

Objective #1 – The current MITA 3.0 Technology Standards methodology will be used in conjunction with other generally accepted methodologies such as Federal Enterprise Architecture (FEA) and The Open Group Architecture Forum (TOGAF) to provide a more robust Florida Medicaid specific Technology Standards Framework.

Goal 2 – Another goal of this deliverable is to establish a process to maintain the TSRG and TSRM. This goal will be accomplished by achieving the following objective:

Objective #2 – As technology standards evolve so must the artifacts that support those technology standards. This deliverable provides *How To* guidance (as attached documents) that describe systematic processes to maintain the TSRG and TSRM.

## 1.5 Referenced Documents

Below is a list of documents referenced in the development of this deliverable including any other project plans and or documentation, Federal or State Authorities, quality standards, State artifacts, and other deliverables relevant to this document.

Governmental agencies and professional associations frequently update, move, or remove documents causing broken links. Therefore, external links to the listed documents are not provided. Documents can potentially be located by pasting the bolded headings into a web browser (e.g., Google) and selecting the most similar document title, or typing into a web browser the organization's name and using the organization's search tool to find the document.

- **Office of the National Coordinator (ONC) Interoperability Standards Advisory (ISA)** The ONC designed the ISA to provide clarity, consistency, and predictability for the public regarding the standards used for health information technology (IT) interoperability purposes.
- **Medicaid Information Technology Architecture (MITA)** MITA is intended to foster integrated business and IT transformation across the Medicaid Enterprise to improve the administration of the Medicaid program. NOTE: The MITA 3.0 contains both standards and a framework.

The following two architecture frameworks were used in conjunction with MITA 3.0 to create the FX TSRM:

- **Federal Enterprise Architecture (FEA) Wikipedia** The Federal Enterprise Architecture framework is the United States' reference enterprise architecture for the federal government. It provides a united approach for the integration of strategic, business, and technology management as part of organization design and performance improvement.
- **Foundation Architecture: Technical Reference Model (TOGAF)** The TOGAF® framework is the global standard for Enterprise Architecture. The Open Group Architecture Forum, which includes more than 200 enterprises, develops and maintains the TOGAF standards and publishes new versions at regular intervals.

# SECTION 2 ROLES AND RESPONSIBILITIES

This section identifies the roles and responsibilities for the primary stakeholders involved with this deliverable.

| ROLE | RESPONSIBILITY |
|---|---|
| SEAS Technical Architect | ▪ Identifies the technology or software required to improve or extend the life of any given TSRM Service Component.<br>▪ Identifies the evolving technology standards necessary to improve the Enterprise.<br>▪ Reviews and proposes new, updates, and retirement of technology components and standards to the FX Technology Standards Committee.<br>▪ Maintains the TSRG and TSRM. The Agency shall determine a time period in which to look at and evaluate any new standards or service components.<br>▪ Extracts TSRM and TSRG artifacts for use in vendor procurements.<br>▪ Identifies Required and Conditional Technology Standards for inclusion in ITNs during FX module development.<br>▪ Identifies risks of adopting new technologies and standards.<br>▪ Prepares an assessment of risks related to proposed additions or changes to standards.<br>▪ Conducts impact analysis of existing projects and procurements of proposed additions or changes to standards. |
| FX Technology Standards Committee | ▪ Creates specific rules to help identify new technologies and standards.<br>▪ Reviews proposed new technology standards.<br>▪ Recommends for approval or denies new TSRM and TSRG list entries.<br>▪ Committee will evaluate risks (e.g., additional costs or limited vendor participation) related to standards and make approval recommendations or communicate and escalate standards recommendations to FX implementation Team |
| FX Stakeholder Organizations | ▪ Reviews and as appropriate may align technology solutions with FX technology standards to improve Medicaid program outcomes.<br>▪ Contributes recommendations for TSRM entries and standards to improve integration, consistency, and coordination. |
| FX Project Owners | ▪ Communicates using the technology vocabulary in the TSRM in proposing, discussing, and implementing technology for the FX System.<br>▪ Identifies and understands technology standards applicable to implementation of FX projects using vendor provided technology or software. |

**Exhibit 2-1: Roles and Responsibilities**

# SECTION 3 TECHNOLOGY STANDARDS REFERENCE MODEL

The TSRM is a component-driven technical framework that provides a foundation to categorize the service components and technologies used now and in the future by the enterprise. This deliverable presents the components in the TSRM as a searchable list structure in the FX Projects Repository (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards).

## 3.1 TSRM SERVICE COMPONENT LIST

The TSRM Service Component List is a custom SharePoint list residing in the FX Projects Repository (FXPR). **Exhibit 3-1: Service Component List Example** depicts a screen shot view of a sample page of the list. The list has multiple views for displaying the data in different context.


**Exhibit 3-1: Service Component List Example**

## 3.2 TSRM SERVICE COMPONENT LIST PARTS

The following are the elements found in an TSRM Repository entry.

### 3.2.1 SERVICE AREA

Service Area is the highest technical layer within the TSRM. It represents an aggregate of Service Components for the use in construction, exchange, and delivery of broad business or technological functions.

### 3.2.2 SERVICE CATEGORY

Service Category is the second technical layer of the model. Service Category further classifies common technologies with respect to the business or technological functions they serve.

### 3.2.3 SERVICE COMPONENT

Service Component is the lowest technical layer of the model. It defines discrete technical components or processes within defined Service Categories and Service Areas.

| | |
|---|---|
| Service Component | Enterprise Service Bus (ESB) |
| Service Area | Application Technology Integration |
| Service Category | Integration Software |
| Description | An enterprise service bus (ESB) implements a communication system between mutually interacting software applications in a service-oriented architecture (SOA). As it implements a distributed computing architecture, it implements a special variant of the more general client-server model, wherein, in general, any application using ESB can behave as server or client in turns. ESB promotes agility and flexibility with regard to high-level protocol communication between applications. The primary goal of the high-level protocol communication is enterprise application integration (EAI) of heterogeneous and complex service or application landscapes (a view from the network level). |
| Status | Proposed |
| Attachments | |
| ID | 121 |

**Exhibit 3-2: Service Component Example**

### 3.2.4 SERVICE COMPONENT LIST – EXTRACT

Attachment C – *Technology Standards Reference Model* contains an extract from the TSRM from the FXPR that is stored in Microsoft (MS) Excel format (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards). This file contains the content as of the date of deliverable submission.

## 3.3 TECHNOLOGY STANDARDS REFERENCE MODEL MAINTENANCE

The TSRM Service Component List is meant to be a living document. The TSRM may evolve through successive updates, expand as needed, and serve a different purpose over time. For this to occur, a mechanism for maintenance must exist. A *How To* document has been created to serve this purpose.

### 3.3.1 TECHNOLOGY STANDARDS REFERENCE MODEL MAINTENANCE PROCEDURES

Attachment A – *How to Maintain the TSRM List* is a MS Word document that describes the procedures to maintain content in the Technology Standards Reference Model (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards).

# SECTION 4 TECHNOLOGY STANDARDS REFERENCE GUIDE

A technology standard is an established norm or requirement for technical systems. Standards are usually a formal document that establishes uniform engineering or technical criteria, methods, processes, and practices. The TSRG is a collection of technology standards applicable to the administration and operation of the enterprise and the future state enterprise. The standards are divided into three compliance levels:

- REQUIRED (Technology Standards that must be adhered to by FX Project Owners (vendors) as applicable to their project).
- CONDITIONAL (Technology Standards that FX Project Owners (vendors) must comply with if applicable).
- REFERENCE (Technology Standards that serve as informational to possibly adhere to or comply with complement/supplement other standards).

Content in the TSRG is in a MS Excel spreadsheet (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards), which adheres to the MITA Framework. The TSRG is a collection of technology standards that originate from many sources.

**Exhibit 4-1: TSRG Standards Hierarchy** shows the types of organizations that are sources of relevant technology standards. Often standards of different organizations are aligned and consistent. Higher-level organizations may adopt lower-level standards or provide guidance that is more specific to the enterprise, organization, or system. In some cases, standards may conflict, or an organization may provide guidance that certain standards are waived or not applicable. The TSRG seeks to help stakeholders understand not only the universe of applicable standards, but also provides a framework and guidance to prioritize and resolve potential conflicting standards. Projects are to follow applicable standards about a topic by viewing standards based on the hierarchy and considering the guidance from the highest level of the hierarchy that is applicable to the project. If Agency guidance existed that overrode State, or lower levels in the hierarchy, projects would follow the Agency guidance. For a project for which CMS/ONC guidance was not relevant, standards from that level of the hierarchy would not be applicable.


**Exhibit 4-1: TSRG Standards Hierarchy Example**

When competing standards exist, the TSRG Standards Hierarchy will allow FX Project Owners or other users to evaluate the competing standards and understand the order of importance.

## 4.1 GUIDE STRUCTURE

**Exhibit 4-2: TSRG Structure** shows the different Compliance Level tabs in the TSRG - Required, Conditional, and Reference.

| | A | B | C | D |
|---|---|---|---|---|
| 1 | | | | |
| 2 | **Domain** | **Area** | **Category** | **Standard Name** |
| 3 | Technical | Design and Implementation | Design | Business Process and Rules Management Plan |
| 4 | Technical | Design and Implementation | Requirements | Requirements Management Plan |
| 5 | Technical | Design and Implementation | Design | Systems Impact Analysis Management Plan |

Required | Conditional | Reference

**Exhibit 4-2: TSRG Structure**

- Required
  - Technology Standards that must be adhered to by FX Project Owners (vendors) as applicable to their project
- Conditional
  - Technology Standards that FX Project Owners (vendors) must comply with, if applicable.
- Reference

- Technology Standards that serve as informational to possibly complement/supplement other standards.

### 4.1.1 DOMAIN

Domain is the highest technical layer within the TSRG. It represents an aggregate of standards related to an FX Project domain. The Domain included in the current TSRG is shown below:

- **Technical** – This domain is responsible for proving concept of IT solutions.

### 4.1.2 AREA

Area is the second technical layer of the TSRG. Area further classifies common standards with respect to the business or technological functions they define. Examples are:

- **Technology** – The area of the enterprise that deals with the concept of IT resources and data that are shared across an enterprise.
- **Design and Implementation** – The area of the enterprise that deals with standards for deliverables within design through implementation phases of a project.

### 4.1.3 CATEGORY

Category is the next technical layer of the guide. Category further classifies common standards with respect to the business or technological functions they serve. The categories are:

- **Architecture, Analysis and Design Standards** – Generally accepted industry standards and specifications for the planning, analysis, and design of a State Medicaid Enterprise architecture.
- **Service Interoperability** – Generally accepted industry standards and specifications for web service standards across platforms, operating systems, and programming languages.
- **Security and Privacy** – Generally accepted industry standards and specifications for securing information.
- **Business Enabling Technologies** – Generally accepted standards and specifications for process management involving definition, improvement, and innovation of business processes.
- **Government Cloud-Hosting Service Platforms** – Generally accepted standards and specifications for allowing government enterprise systems to be hosted on cloud platforms.
- **Project Documentation** – Standards for content, format, and management of the artifacts that projects produce.
- **Data Standards** – Generally accepted standards and specifications for data content, format, and data management.

### 4.1.4 PROJECT LIFE CYCLE

Project Life Cycle specific standards are included in the TSRG for the following phases:

- Requirements
- Design
- Development
- Testing
- Implementation
- Maintenance

### 4.1.5 STANDARD NUMBER

Standard number is the unique number given to each Required or Conditional standard.

### 4.1.6 STANDARD NAME

Standard name is the lowest technical layer of the TSRG. It is intended to define the standards supporting the specific category and domain applicable to the administration and operation of a State Medicaid Enterprise.

All other column definitions can be found in Attachment B – *How to Maintain the TSRG List* (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards).

## 4.2 TECHNOLOGY STANDARDS REFERENCE GUIDE MAINTENANCE

The TSRG is a living document. The TSRG may evolve through successive updates, expand as needed, and serve additional purposes over time. For this to occur, a mechanism for maintenance must exist. A *How To* document has been created to serve this purpose.

### 4.2.1 TECHNOLOGY STANDARDS REFERENCE GUIDE MAINTENANCE PROCEDURES

Attachment B – *How to Maintain the TSRG List* is a MS Word document that describes the procedures to maintain content in the Technology Standards Reference Guide (i.e., FX Home > Standards and Plans > Technology > FX Technology Standards).

## 4.3 TECHNOLOGY STANDARDS COMMUNICATIONS AND COMPLIANCE

The SEAS Vendor shall coordinate, provide technical expertise, and communicate with the FX Project Owner regarding Technical Standards. The SEAS Vendor will also assess FX Project Owner adherence to the Technology Standards and communicate adherence to the Agency.

There are multiple SEAS deliverables that define specific standards in the Technology domain. A common communication and compliance process has been developed that will be used for

each type of technology standard. Using a consistent communication and compliance process enhances understanding, process consistency, and reduces complexity for stakeholders to the standards communication and compliance processes. For this reason, the common communication and compliance process for technology standards in the FX technology domain exists as an attachment to this deliverable.

### 4.3.1 TECHNOLOGY STANDARDS COMMUNICATION, SUPPORT, COMPLIANCE, AND COMPLIANCE REPORTING PROCEDURES

Attachment D – *Technology Standards Communication, Support, Compliance, and Compliance Reporting Procedures* describes the processes to:

- 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 Compliance Assessment process is further described and elaborated in Attachment D, including a description and the purpose of Attachments E, F, and G (defined in the Supporting Documents section below).

**Note:** For communications to stakeholders that are involved in active procurements, the FX Procurement Contract Manager will work with the Agency Procurement Office and use Agency procurement notification processes. To avoid duplication and inconsistency, Agency procurement processes (e.g., not updating procurement library materials during an active procurement) are not duplicated in this deliverable or Attachment D.

## SECTION 5 SUPPORTING DOCUMENTS

The following documents can be found in the FXPR at FX Home > Standards and Plans > Technology > FX Technology Standards.

**Attachment A** – *How to Maintain the TSRM List* is a Word document that describes the procedures to maintain content in the Technology Standards Reference Model.

**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 list.

**Attachment C** – *Technology Standards Reference Model* contains an extract from the TSRM from the FXPR that is stored in MS Excel format. This file contains the content as of the date of deliverable submission.

**Attachment D** – *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.

**Attachment E** – *Standards Compliance Assessment Form* is used by the SEAS Vendor to capture and store the results of FX Project standards compliance assessments performed.

**Attachment F** – *Standards Compliance Assessment Form Example* provides an illustrative example of results from a compliance assessment to demonstrate how to fill out the assessment form.

**Attachment G** – *Compliance Assessment Summary* is a spreadsheet created by the SEAS Vendor to capture and report the results of FX Project standards compliance assessments. The spreadsheet will reside in the FXPR.