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Agency of Administration

SEALED BID REQUEST FOR PROPOSAL

Vermont Medicaid Data Lake and Data Analytics and Reporting Solution

ISSUE DATE	January 25, 2022
BIDDERS CONFERENCE	February 1, 2022 – 9:00 AM (EST)
QUESTIONS DUE	February 7, 2022 – 4:30 PM (EST)
Answers to questions posted	February 22, 2022
RFP RESPONSES DUE BY	March 8, 2022 – 4:30 PM (EST)

PLEASE BE ADVISED THAT ALL NOTIFICATIONS, RELEASES, AND ADDENDUMS ASSOCIATED WITH THIS RFP WILL BE POSTED AT:

<http://www.bgs.state.vt.us/pca/bids/bids.php>

THE STATE WILL MAKE NO ATTEMPT TO CONTACT INTERESTED PARTIES WITH UPDATED INFORMATION. IT IS THE RESPONSIBILITY OF EACH BIDDER TO PERIODICALLY CHECK THE ABOVE WEBPAGE FOR ANY AND ALL NOTIFICATIONS, RELEASES AND ADDENDUMS ASSOCIATED WITH THIS RFP.

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1. OVERVIEW:

1.1. SCOPE AND BACKGROUND:

1.1.1. Scope of Work

Through this Request for Proposal (RFP), the State of Vermont, Agency of Digital Services (ADS), in collaboration with the Department of Vermont Health Access (DVHA), through the Agency of Administration, Office of Purchasing and Contracting, (hereinafter the "State") is seeking to establish a contract with one or more vendors to develop, implement, operate, and maintain Software as a Services (SaaS) solutions for a Medicaid Data Lake (MDL) and Data Analytics and Reporting (DAR) capabilities, including related information technology systems and business consulting services. The MDL and DAR solutions are essential to achieving the State's near-term goals for a Medicaid Data Warehouse and Analytics Solution (MDWAS). The MDL and DAR will integrate with the current state architecture of the Medicaid Enterprise System (MES) (a.k.a. Vermont Medicaid enterprise). They must be scalable and extensible to support further transformation initiatives of the State's: (1) mid-term Medicaid Management Information System (MMIS) modernization strategy and (2) long-term vision to leverage data and information from all solutions across the Vermont human services enterprise.

As the next step in the State's MMIS modernization strategy, the architectural approach of the MDWAS will integrate the MDL and DAR solutions with the State's existing Analytics Data Warehouse (ADW), which stores statewide health information (i.e., not specific to Vermont Medicaid). The MDL will ingest data from various data sources across the MES, store it, and make the data available for ADW ingestion. Once data is in the ADW, the DAR solution will be the primary Business Intelligence (BI) platform for State users and external partners to: generate reports and data extract files; create data visualizations and dashboards; monitor financials; perform rate modeling; forecast program and health care trends; monitor post-payment MMIS activity for fraud, waste, and abuse; explore analytical insights; and continue to grow, innovate, and strengthen cross-agency and Federal/State initiatives that improve the conditions and well-being of Vermonters.

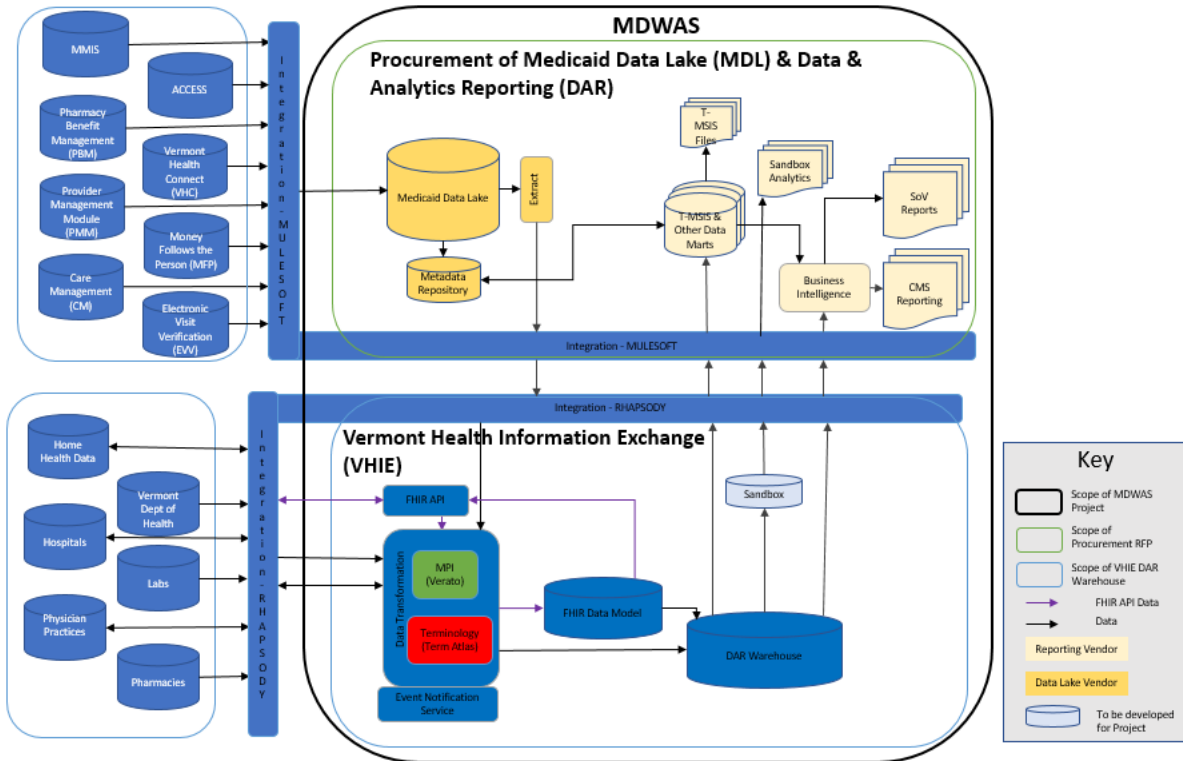
The MDL and DAR solutions must meet the following MDWAS high-level objectives:

- a) Align with the State's vision to transition from legacy monolithic applications with siloed data to an evolved and integrated human services enterprise by collecting Medicaid-related data from disparate data sources to meet the State's BI needs.
- b) Establish an MDL within the State's MES architecture that ingests Medicaid-related data from disparate data sources and makes it available to the ADW.
- c) Provide comprehensive and robust BI capabilities that support Vermont-specific reporting in accordance with: (1) Federally mandated requirements, and (2) defined business drivers and needs of the Vermont Medicaid program.
- d) Inclusion of Program Integrity (PI) reporting that establishes an integrated Surveillance and Utilization Review System (SURS) solution to monitor, identify, and analyze post-payment MMIS activity for provider service and client utilization exceptions and patterns of fraud, waste, and abuse.
- e) Implement comprehensive and robust tools, processes, and services to support vigorous data management functions that consolidate disparate data from multiple data source systems and repositories.
- f) Implement scalable and extensible solutions that meet the long-term vision of leveraging data and information across the human services enterprise over the life of the contract.
- g) Supplement State staff with assigned knowledgeable and experienced analytics and reporting personnel with expertise in Federal/State reporting, complex analytic analysis, and program integrity, providing post-implementation continued education, functionality training, report modification, new report creation, and new analysis initiatives.

- h) Establishment of and alignment to an enterprise modular project and operational management/administration framework that enables the successful design, development, implementation, certification, operation, maintenance, and probable contractual close out of systems and services with the State.

Figure 1 represents the State's vision for the future state MDWAS environment, utilizing the State's existing investment in MuleSoft as the integration layer, as well as leveraging the existing capabilities of the State's Health Information Exchange (VHIE) environment, operated by Vermont Information Technology Leaders (VITL).

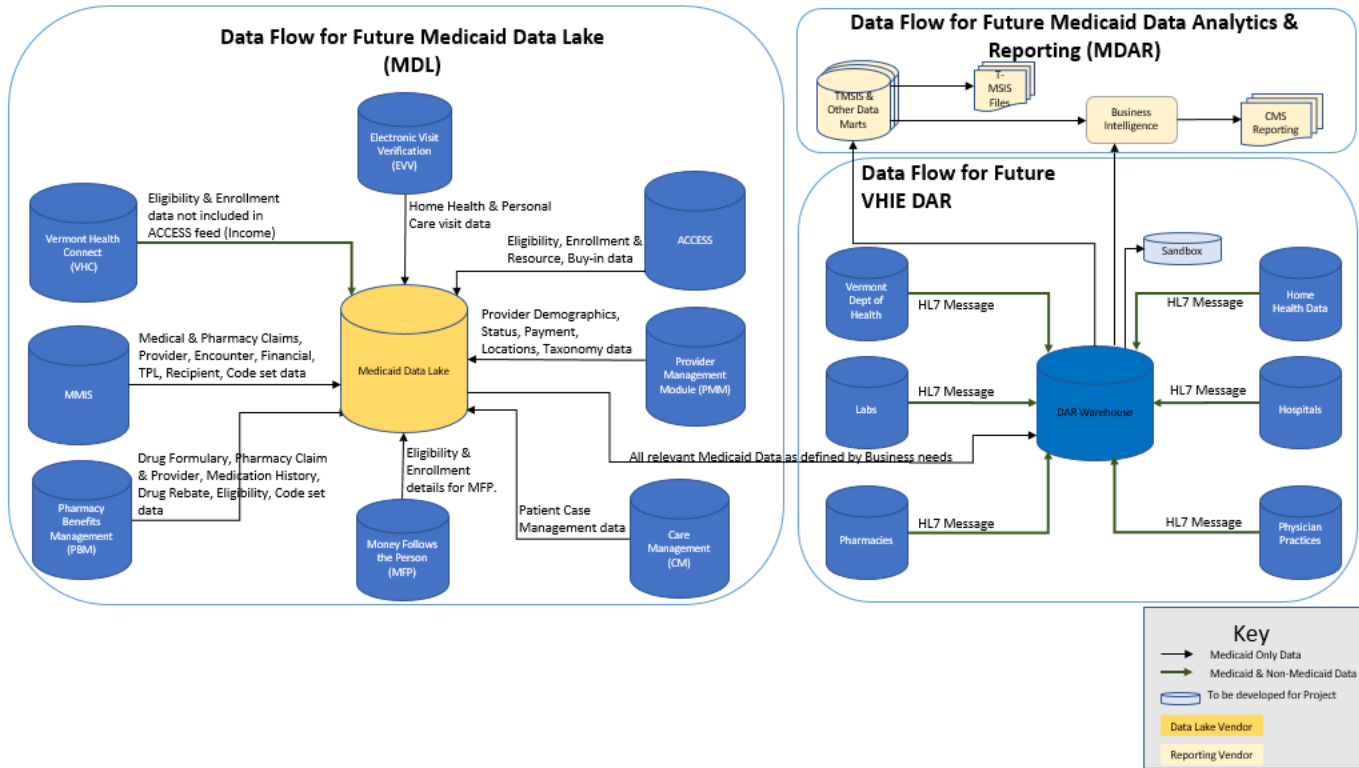
Figure 1: Conceptual Vision of MDWAS Future State



The VITL-operated ADW is a PostgreSQL database that receives all the data stored in the Fast Healthcare Interoperability Resources (FHIR) Data Model database, which in turn receives FHIR JavaScript Object Notation (JSON) data held in the FHIRbase data model (an open-source Massachusetts Institute of Technology licensed framework). Additionally, data elements not already in FHIR but needed for Medicaid reporting purposes will be added, linked, and checked (referential integrity) in the PostgreSQL environment. This framework allows the original FHIR documents, and any additional data needed for the DAR solution, to be stored in the PostgreSQL, enabling relational database functionality and returning data from queries in a tabular result set instead of FHIR.

Figure 2 is a representation of the data flows for MDWAS, depicting high-level inbound and outbound data for the MDL and DAR.

Figure 2: MDWAS Future State Data Flows



1.1.1.1. Medicaid Data Lake (MDL) Architecture

The MDL vendor will create and customize a consolidated repository to house the data from multiple disparate data sources in support of the effective management and oversight of the Medicaid program, including timely, accurate, and consistent enterprise reporting to meet both State and Federal reporting needs. This includes the overall architecture, infrastructure, and security for the MDL. The proposed architecture must be scalable, extensible, and meet future State needs. The proposed system must also meet data integrity, performance, security, and other technical requirements.

Data sources in scope for initial ingestion to the MDL include but are not limited to:

- MMIS (e.g., medical and pharmacy claims data, provider, client, financial data, managed care, other insurance, Third Party Liability (TPL), service authorization/prior authorization and other utilization management activities, reference data),
- Pharmacy Benefits Management (PBM) data (e.g., pharmacy claims data, drug formulary, drug rebate),
- Eligibility and enrollment data from multiple solutions (e.g., income data, enrollment data, client demographic information, State Medicare Buy-In),

- Electronic Visit Verification (EVV) (e.g., Home Healthcare & Personal Care visit data), and
- Provider Management Module (PMM) (e.g., State licensure data, provider geographic data)

See Section 2.7 for the detailed solution requirements framework, user stories, and State expectations for the MDL architecture solution.

The MDL must address the following:

- 1.1.1.1.1. **Architecture and Environments** - The solution must include robust, secure environments that enable the development, testing, and production activities associated with the comprehensive solution. The data lake's architecture must incorporate the State's integration platform for the ingestion and distribution of data to and from the solution.
- 1.1.1.1.2. **Security and Access** - The solution must encompass complete security and access controls to ensure the protection of all data contained within the data lake, provisions for controlling access to that data, management of all user accounts, and maintenance of access/audit information covering the comprehensive warehouse, analytics, and reporting system. Access to all data must be provided to all State-approved users through a variety of channels, and all data must be retained and available per Federal/State specifications.
- 1.1.1.1.2. **Data Protection Strategies** - Encompasses the comprehensive framework and capabilities of access protection and security at all levels of the system(s), (inclusive of platform, failover, database, tool, reporting/reporting access channel, extraction, and analytics) that work together to provide comprehensive data protection.
- 1.1.1.1.2. **Enterprise Data Integration** - Establishes the standards for integration and interoperability with the State's MES, encompassing both integration and interoperability with other modules, as well as with external data sources. The proposed integration solution must be capable of continuously adapting as integration standards evolve at both the State and Federal levels. As modularization within the MES continues, the vendor must provide an approach that evolves, matures, and adapts in alignment with all modules and industry standards.
- 1.1.1.1.2. **Monitoring** - Encompasses the ongoing oversight and reporting of data protection and user access authority to the platform, tools, and reports.
- 1.1.1.1.3. **Extract, Transform, Load (ETL)** - The solution must include the mechanisms and tools to enable the extraction and ingestion of disparate data across multiple systems and repositories on both an initial and ongoing/incremental basis over the life of the Contract.
- 1.1.1.1.4. **Audit Controls** - The solution must include comprehensive mechanisms to control, monitor, and report the data refreshes to ensure quality ingestion and storage of the source data.
- 1.1.1.1.5. **Performance** - The solution must include a mechanism to manage and monitor the MDL to ensure that it is always performing at, or exceeding, State-approved service levels. This approach must accommodate the expected overall system health and performance not only at implementation but throughout the life of the Contract, including during periods of growth, capacity-driven upward scaling, and new data source integration. Meeting these expectations ensures that acceptable performance metrics are achieved through State-approved and specified system uptimes and response times, as well as requirements to maintain and monitor the system. Additionally, this approach must include both the technical (e.g., system and tools) and operational business support (e.g., staff) necessary to help identify, assess, and capitalize on

any/all improvements available to realize all functionality of the MDL and ensure optimal operation. See [Section 2.7.3](#) for the detailed solution requirements framework, user stories, and State expectations surrounding the MDL performance solution.

- 1.1.1.1.6. **Data Management** - The MDL Bidder will propose a comprehensive strategy and solution that will address data management within the MDL systems and data repositories. This solution must solve for data source engagement, governance, integration, definition, and protection. The State recognizes that the foundation of any successful data management strategy must be a robust mechanism to gather, link, align, cleanse, normalize, standardize, organize, integrate, consolidate, and transform data from multiple diverse and disparate data sources. The State expects the solution vendor to provide modern methods of data management via tools and processes that encompass metadata, data aggregation, data dictionaries, data lineage, data storage, retention, and access. See [Section 2.7.4](#) for the detailed solution requirements framework, user stories, and State expectations surrounding the Data Management solution.
- 1.1.1.1.6. **Metadata** - The solution must include the establishment and maintenance of all metadata through processes and tools, including the establishment and maintenance of a Centralized Metadata Repository. Additionally, it will be critical that the solution provides State business users with documentation and training surrounding how the metadata can be utilized to help business users evaluate and select necessary data attributes to generate accurate and relevant reports.

1.1.1.2. The Data Analytics and Reporting (DAR) Solution

The DAR vendor will propose a solution that provides the reporting and analytics tools and necessary reporting and analytics architecture to provide accurate, near real-time data reporting, querying, and visualization capabilities. Dashboards and scorecards, as well as a variety of advanced analytics, should also be a part of any proposed solution. It is envisioned that over time this solution will replace the existing State/Federally required reporting and analytics systems and functionalities as approved by the State. The business and technical processes of the proposed solution must ensure that all existing State-approved reporting and analytics services are replaced and that the replacement reports are maintained and fully supported over the life of the Contract. The vendor will propose a robust collection of analytic toolsets that are accessible to end users logging on from multiple locations. The DAR solution can be proposed as a standalone modules/toolset, in accordance with CMS Conditions and Standards and definition for modularity; however, it must integrate with the MDWAS overall. See RFP [Section 2.8](#) for the detailed solution requirements framework, reporting categories descriptions and requirements, user stories, and State expectations surrounding the Data Analytics and Reporting solution.

Included under Data Analytics and Reporting are the following sub-categories of technology-based solution capabilities that should be addressed:

- 1.1.1.2.1. **Architecture and Environments** - The solution must include robust, secure environments that enable the development, testing, and production activities associated with the comprehensive solution. The DAR architecture must incorporate the State's integration platform for the ingestion and distribution of data to and from the solution.
- 1.1.1.2.2. **Security and Access** - The solution must encompass complete security and access controls to ensure the protection of all data contained within the DAR solution, provisions for controlling access to that data, management of all user accounts, and maintenance of access/audit information covering the comprehensive warehouse, analytics, and reporting system. Access to all data must be provided to all State-approved users through a variety of channels, and all data must be retained and available per Federal/State specifications.
 - 1.1.1.2.2. **Data Protection Strategies** - Encompasses the comprehensive framework and capabilities of access protection and security at all levels of the system(s), (inclusive of platform, failover, database, tool, reporting/reporting access channel, extraction, and analytics) that work together to provide comprehensive data protection.
 - 1.1.1.2.2. **Monitoring** - Encompasses the ongoing oversight and reporting of data protection and user access authority to the platform, tools, and reports.
- 1.1.1.2.3. **DAR Performance** - The solution must include a mechanism to manage and monitor the DAR solution to ensure that it is always performing at, or exceeding, State-approved service levels. This approach must accommodate the expected overall system health and performance not only at implementation but throughout the life of the Contract including during periods of growth, capacity-driven upward scaling, and new data source integration into reports. Meeting these expectations ensures that acceptable performance metrics are achieved through State-approved and specified system uptimes and response times, as well as requirements to maintain and monitor the system. Additionally, this approach must include both the technical (e.g., system and tools) and operational business support (e.g., staff) necessary to help identify, assess, and capitalize on any/all improvements available to realize all functionality of the DAR and ensure optimal operation. See [Section 2.7.3](#) for the detailed solution requirements framework, user stories, and State expectations surrounding the DAR performance solution.

- 1.1.1.2.4. **Data Management** - The DAR Vendor will propose a comprehensive strategy and solution that will address data management within the DAR systems and data repositories. This solution must solve for data source engagement, governance, integration, definition, and protection. The State recognizes that the foundation of any successful data management strategy must be a robust mechanism to gather, link, align, cleanse, normalize, standardize, organize, integrate, consolidate, and transform data from multiple diverse and disparate data sources. The State expects the solution vendor to provide modern methods of data management via tools and processes that encompass metadata, data aggregation, data dictionaries, data lineage, data storage, retention, and access. See RFP [Section 2.7.4](#) for the detailed solution requirements framework, user stories, and State expectations surrounding the Data Management solution.

Included under Data Management are the following sub-categories of solution capabilities that should be addressed:

- 1.1.1.2.4. **Metadata** - The solution must include the establishment and maintenance of all metadata through processes and tools, including providing necessary metadata to the State Centralized Metadata Repository.
- 1.1.1.2.4. **Reporting Tools and Capabilities** - The DAR must include a comprehensive suite of tools that will enable complex querying, report generation, data visualization capabilities, and dashboarding.
- 1.1.1.2.4. **Query and Data Semantic Tools** - The solution must include the environment and tools that provide all authorized users the ability to perform queries directly against the warehouse data within the VITL environment, making it available for extraction, reporting, or further analysis in a user-defined and actionable format.
- 1.1.1.2.4. **Analytical Tools and Capabilities** - The DAR must provide a comprehensive suite of tools to support operational management, and strategic decision making across the enterprise. The suite of tools should support online analysis within the host environment (i.e., moving away from siloed analysis practices). Additionally, the scope of analysis functionality should include statistical studies, member predictive analysis, sampling, extrapolation, trending, and geospatial reporting and analysis through the proposed reporting tools and capabilities. Finally, the proposed solution should provide a detailed list of the proposed and available tools and give an approach to supporting a State-internal team of power users who will use the analytic workspaces and platforms within the VITL environment.
- 1.1.1.2.4. **Data Models and Augmentation** - The solution must include a State-specific, business-centric model that aligns with the State's data, business practices, reporting needs, and policies. The model must support point-in-time reporting and yield optimal query performance. Additionally, the solution must enable the calculation and storage of new "value-add" data elements for Vermont-specific reporting purposes (e.g., address latitude/longitude and roll up category codes).
- 1.1.1.2.4. **Data Storage and Retention** - The solution must include the appropriately designed and implemented databases, user schemas, and data marts necessary to fulfill the business intelligence/reporting and analytics needs of the State business teams.
- 1.1.1.2.5. **State and Federal Reporting** - A significant portion of the solution is devoted to the creation of predefined, State-specific reports that support State and Federal reporting business requirements. The necessary reporting activities can take on various styles inclusive of, but not limited to, predefined/canned/fixed reporting, ad hoc/user-prompted reporting, and interactive dashboard engagement. The reporting and querying requirements elicited from the business users are driven by the State's need to evaluate its programs, as measured by both singular programmatic operational performance

metrics to enterprise-wide, multi-program, operational performance metrics. This analysis and reporting aids State leadership in benchmarking its progress towards achieving overall policy and business objectives. The reporting functionality must be inclusive of, but not limited to, the categorizations listed below (further refinement, definition, and specified requirements for each are described further in [Section 2.8.3](#)):

- a) Reporting Library Repository
- b) Medicaid Financial Management Reporting
- c) Provider Enrollment and Management Reporting
- d) Claims Management Reporting
- e) Utilization Management Reporting
- f) T-MSIS File Creation and Research Support
- g) Federal Reporting
- h) Healthcare Quality Reporting
- i) Management Dashboards
- j) Pharmacy Management Reporting
- k) E&E 1095 Reporting

1.1.1.2.6. **Program Integrity (PI) Reporting and Analysis** - The State recognizes its business need for a comprehensive program integrity/fraud, waste, and abuse solution. The proposed solution must include overall business support of the State-staffed program integrity team to assist with the State's program integrity research and management activities. The business support services proposed must account for fraud, waste, and abuse research and case evaluation, standard Surveillance Utilization Review System (SURS) reporting, coupled with the ability to apply member risk scoring and predictive analytics.

- a) SURS Ranking Reporting
- b) SURS Profile Reporting
- c) Peer Comparison Analysis
- d) SURS Exception Reporting
- e) SURS Population Analysis
- f) SURS Member Clinical Risk Analysis
- g) Program Integrity Predictive Analysis
- h) Program Integrity Ad hoc Reporting

Bidders are required to respond to all requirements presented in [Section 2.8.4](#)

1.1.1.3. **Operational Business Services and Support**

The DAR vendor must propose a solution that encompasses the overarching services and support required by the State to address its reporting and analytics needs. The State envisions a solution where the vendor serves as a true partner and will work with the State to establish a collaborative relationship. The vendor must be prepared to provide full resources, services, and support to perform data analytics, report development and management, tool application, architecture/platform management, and data integration to meet and/or exceed the State's requirements and expectations throughout the life of the Contract. See RFP [Section 2.9](#) for the detailed solution requirements framework, user stories, and State expectations surrounding the Operational Business Services and Support solution.

Included under Operational Business Services and Support are the following sub-categories of service-based solution capabilities that should be addressed:

1.1.1.3.1. **Operational Business Services** - The vendor will detail their approach to the provision of operational business services and support during the implementation and operational stages of the Contract. This should include the provision of the resources, staff, and training necessary to allow authorized users to utilize all reporting and analytical functionality available in the technical solution, to have access to the support that provides the technical and business expertise necessary to capitalize on all module

functionality, and to respond to both day-to-day and advanced operational business needs.

1.1.1.3.2. **Reporting Services** - The vendor will detail their approach to the provision of staffing and resources to provide responsive, accurate, near real-time reporting (both State-specific and Federal/required reporting) that replaces and supplants current reporting services. The resources and staff that are proposed to meet the State’s expected reporting service levels should fully support the State through all phases of this solicitation’s resulting Contract. The expected services should encompass:

- a) Reporting Consultation and Engagement
- b) Comprehensive Report Generation

1.1.1.3.3. **Data Analytics Services** - The vendor will detail their approach to the provision of dedicated staff to support robust querying and visualization capabilities that include dashboards and scorecards, as well as a variety of advanced analytics coupled with the necessary support services. These support services are envisioned to assist and enhance the State’s ability to conduct advanced analysis, interpret data patterns, and gain insights based upon the analysis performed in order to better anticipate changing business, management, and policy. The expected services should encompass:

- a) Advanced Analytics Services
- b) Program Integrity Studies and Analysis Services

1.1.2. Background –Current Medicaid Data Solutions and Conditions

Vermont’s current data warehouse and analytic architecture consists of two separate environments. The first environment is hosted and managed by the Medicaid Management Information System (MMIS) and Fiscal Agent vendor and is called EVAH. The second environment is maintained by the State of Vermont’s Data Services Team and is called whMedicaid.

Data (System or Major Dataset)	Administered By	BI Systems Used by the State
MMIS EVAH (Enhanced Vermont Ad Hoc) *CMS-certified Medicaid Data Warehouse (MDW)	Gainwell Technologies (Vermont Medicaid Fiscal Agent)	<ul style="list-style-type: none"> • BusinessObjects (BOBJ)
whMedicaid	State of Vermont, Agency of Digital Services (ADS), Data Management Division, AHS Data Team	<ul style="list-style-type: none"> • SQL Server Management Studio (SSMS) • IBM SPSS Statistics

The EVAH data store, using the Oracle Relational Database Management System (RDBMS) for the database, contains a subset of data from the MMIS operational system and is primarily accessed through BusinessObjects. Users utilize BusinessObjects to run canned reports as well as to generate datasets for extract. Due to toolset limitations impacting the quantity of data that can be returned in a single request, data is extracted in chunks that are then stitched together utilizing tools on the user’s desktop, such as Excel, to generate the desired dataset. As an example, a user may iteratively extract and stitch one month of claims data to construct a dataset encompassing a total of three years’ worth of data. The EVAH data store is updated on a weekly basis and stores MMIS data that has been transformed into a star schema for ease of reporting across service types.

The whMedicaid data store is frequently referred to as the Data Warehouse for Vermont Medicaid and is managed by DVHA’S Data Team. The MMIS vendor provides full MMIS table extracts to

DVHA, which are then loaded into a Structured Query Language (SQL) Server database. whMedicaid was developed to provide the State Data Team direct query access to a broader set of MMIS business areas. It is updated weekly via MMIS table copies and is a more extensive dataset, but the structures are separated, transactional structures reflecting the MMIS. Each of the reporting data stores holds over 20 years of historical service information as well as full member and provider file histories.

Although whMedicaid contains full extracts of the operational data, the Data Team continues to pull data via BusinessObjects from the EVAH data store, when appropriate, to ensure the relational integrity of the generated datasets.

The EVAH reporting repository strategy was based on the business/program needs of the time. The EVAH data store was developed to provide direct business user access to the detailed MMIS data and was developed 22 years ago, with BusinessObjects being the original tool implemented to provide query and reporting capabilities. This tool remains the mechanism by which users select data and create ad hoc reports. The DVHA business teams have a limited number of software licenses, which limits who can utilize the data within EVAH. In addition, the user community has limited knowledge of how the data integrates together in the operational system, making interacting through the interface provided within the current BusinessObjects Universes a challenge when attempting to craft the appropriate query to address a specific business need. The tool does not bridge that data knowledge gap for the business teams and further limits the number of business users who can effectively utilize the current environment.

Because of the challenges, the EVAH platform is most often used as a data source from which to pull data rather than as a platform for online analysis and advanced report development. The business teams use various tools when working outside of the platform to complete their analysis and reporting duties. The primary tools used include IBM Statistical Package for Social Sciences (SPSS) and Microsoft Excel, but the State has been exploring the usage of PowerBI and ArcGIS.

Because the EVAH and whMedicaid data stores were built at different times for distinct business needs, there is duplication and unnecessary redundancies. In regard to the MDWAS warehouse solution, the expectation is that the solution vendor will source data from the original transaction applications (e.g., MMIS, PBM, and the state eligibility system) rather than from either of the current reporting data stores.

The MMIS vendor is currently responsible for the T-MSIS file generation, first extracting data directly from the MMIS database and then performing the required editing, formatting, and file creation.

Current data limitations, regardless of the reporting environment, include the lack of income data from the state eligibility system, state budget data, state licensure data, and detailed latitude/longitude values for member and provider locations. Not having this information readily available limits the analysis the State can currently accomplish. The MMIS data source includes data from the claims, encounter, financial, provider, recipient, TPL, and reference business subject areas.

Please reference DMDWAS-CXD-00001_Medicaid Enterprise System (MES)_Interim State for MDWAS RFP.pdf (included in the procurement library), for an overview of the reporting data stores in relation to the overall DVHA environment. Details of the current state can be found in the procurement library. We recommend bidders complete a thorough read of the procurement library. The library provides details on report specifications and system usage statistics. Successful bidders are expected to demonstrate an understanding of Vermont's current and future data needs.

Please reference User Access and EVAH Size in the procurement library for DVHA specifications on data stored in EVAH, current user access, and EVAH size information.

1.2. **CONTRACT PERIOD:**

Contracts arising from this RFP will be for a period of up to seven years. It is anticipated that the first two years and five months will be for Design, Development, and Implementation (DDI) and five years for MDWAS operation.

The State anticipates the start date will be March 1, 2022, with the following planned contractual phases:

Table 1: Anticipated Project/Contract Phases

Item ID	Project/Contract Phases	Duration	Start Date	End Date
A	Design, Development, and Solution Implementation Phases	29 months	9/12/2022	2/28/2025
A.1	MDL DDI	6 months	9/12/2022	3/31/2023
A.2	DAR DDI Phase I Encompasses MDW core / base financial management/claims reporting and T-MSIS	24 months	9/12/2022	2/28/2024
A.3	DAR DDI Phase II Additional data integration, PI system/services, and additional reporting	12 months	2/1/2024	2/1/2025
B	Operations and Maintenance Phases	79 months	2/1/2023	7/28/2029
B.1	MDL Operations Go-Live	79 months	2/1/2023	7/28/2029
B.2	DAR Operations Go-Live – Phase I	60 months	8/1/2024	7/28/2029
B.3	DAR Operations Go-Live – Phase II	55 months	2/2/2024	7/28/2029
C	Certification Task	8 months	5/1/2025	1/31/2025
D	Turnover and Closeout - Base Contract	12 months	08/01/2028	7/28/2029

1.3. **SINGLE POINT OF CONTACT:** All communications concerning this RFP are to be addressed in writing to the State Contact listed on the front page of this RFP. Actual or attempted contact with any other individual from the State concerning this RFP is strictly prohibited and may result in disqualification.

1.4. **BIDDERS' CONFERENCE:** A mandatory bidders' conference will be held remotely at the date and time indicated on the front page of this RFP.

1.4.1. To sign up for attendance at the bidders' conference, please submit your company name, the name of the person or persons representing your company and email address to the State contact listed on page one of this RFP so that the State may provide the online login information in advance of the bidders' conference.

1.4.2. **If you do not attend the bidders' conference, you will be ineligible to submit a proposal to the State for the Medicaid Data Lake, Analytics and Reporting Solution.**

1.5. **QUESTION AND ANSWER PERIOD:** Any vendor requiring clarification of any section of this RFP or wishing to comment on any requirement of the RFP must submit specific questions in writing no later than the deadline for question indicated on the first page of this RFP. Questions may be e-mailed to the point of contact on the front page of this RFP. Questions or comments not raised in writing on or before the last day of the question period are thereafter waived. A copy of all questions or comments and the State's responses will be posted on the State's web site <http://www.bgs.state.vt.us/pca/bids/bids.php>. Every effort will be made to post this information as soon as possible after the question period ends, contingent on the number and complexity of the questions.

1.6. **CHANGES TO THIS RFP:** Any modifications to this RFP will be made in writing by the State through the issuance of an Addendum to this RFP and posted online at <http://www.bgs.state.vt.us/pca/bids/bids.php>. Verbal instructions or written instructions from any other source are not to be considered.

2. DETAILED REQUIREMENTS/DESIRED OUTCOMES:

2.1. **MDWAS Outcomes** - In collaboration with the Centers of Medicare and Medicaid Services (CMS), the State has approved the following outcomes to be achieved as a result of the successful development, implementation, operation, and federal certification of the MDWAS information technology system(s), business and consulting solutions and services. It is the expectation of the State that the entire MDWAS will be certified as a whole module and all vendors will support the certification efforts. The CMS and State-approved outcomes are as follows:

- 2.1.1. **DSS/DW1**: The system supports various business processes' reporting requirements.
- 2.1.2. **DSS/DW2**: The solution includes analytical and reporting capabilities to support key policy decision making.
- 2.1.3. **PI2 Methods for Identifying Fraud**: System provides a method for identifying suspected inappropriate services and incorrect billing.
- 2.1.4. **PI6 Improper Payment Recovery**: System can recover improper payments by: (a) Tracking repayments and outstanding amounts due at an individual transaction level as well as aggregating by provider, time period (b) Supporting electronic transfer back to the state (c) Temporarily limiting future payments to provider(s) who have an outstanding recovery balance.
- 2.1.5. **PI7 DSH Audits**: System can complete the required independent certified audit of Disproportionate Share Hospital (DSH) payments for each Medicaid State Plan rate year using payment and utilization information.
- 2.1.6. **PI12 Estimating Improper Payments**: System can submit following information to CMS for among other purposes, estimating improper payments in Medicaid and CHIP, that include, but are not limited to— (1) Adjudicated fee-for-service or managed care claims information, or both, on a quarterly basis, from the review year; (2) Upon request from CMS, provider contact information that has been verified by the State as current; (3) All medical, eligibility, and other related policies in effect, and any quarterly policy updates; (4) Current managed care information, and any quarterly updates applicable to the review year; (5) Data processing systems manuals; (6) Repricing information for claims that are determined during the review to have been improperly paid; (7) Information on claims that were selected as part of the sample, but changed in substance after selection, for example, successful provider appeals; (8) Adjustments made within 60 days of the adjudication dates for the original claims or line items, with sufficient information to indicate the nature of the adjustments and to match the adjustments to the original claims or line items; (9) Case documentation to support the eligibility review, as requested by CMS; (10) A corrective action plan for purposes of reducing erroneous payments in FFS, managed care, and eligibility; and (11) Other information that the Secretary determines is necessary for these purposes.
- 2.1.7. **FM8**: State and federal entities receive timely and accurate financial reports (cost reporting, financial monitoring, and regulatory reporting), and record of all transactions according to state and federal accounting, transaction retention, and audit standards.

Additional State-specific outcomes will be developed in collaboration with the vendors upon contract execution. Among those outcomes will include the ability to support Medical Loss Ratio (MLR) calculations in addition to other federal reporting, in support of the Vermont 1115 waiver.

2.2. Bidder Qualifications and Experience

2.2.1. MDWAS Bidder Qualifications and Experience Requirements

The State has determined a minimal set of Bidder qualifications and experience that any potential Bidder must possess to fulfill the obligations of this RFP and resulting Contract. Any Bidder responding to this RFP may be required to furnish additional information supporting their capability to comply with the conditions for submitting a response and fulfilling the Contract if receiving an award. The State will accept experience and qualifications from any potential Bidder under either/both their current legal business name, , or experience and qualifications attained under a previous legal business name or business entity that has been consolidated, acquired, or merged under a different business, legal entity, so long as it is accompanied with a signed, executed, certificate of merger, as filed with the Vermont Secretary of State. Before the award of any Contract, the State shall be satisfied that the Vendor has sufficient qualified resources available for performing the work described in this Proposal. Vendors are responsible to submit supporting documentation to the Department that indicates compliance to these qualifications:

- 2.2.1.1. The Bidder, or Subcontractors proposed as part of the solution, has a minimum of three or more successful project contract/engagements within the past eight years from this RFP's issue date providing Data Lake and/or Data Analytics and Reporting System development and implementation activities for a payer system or health care decision support system that aligns with the scope of work of this RFP. Experience can be as a prime or subcontractor on either public or private sector projects, that resulted in the successful development, implementation, and certification of Data Lake and/or Data Analytics and Reporting System.
- 2.2.1.2. The Bidder, or Subcontractors proposed as part of the solution, has a minimum of three or more successful project contract/engagements within the past eight years from this RFP's issue date providing business intelligence or data analytic development and implementation activities for a payer system or health care decision support system that aligns with the scope of work of this RFP. Experience can be as a prime or Subcontractor on either public or private sector projects that resulted in the successful development, implementation, and certification of business intelligence and data analytics solutions and services.
- 2.2.1.3. The Bidder, or Subcontractors proposed as part of the solution, has a minimum of two or more successful project contract/engagements within the past eight years from this RFP's issue date providing comprehensive and complex reporting development and support services regarding the completion and submittal of both Federal and State required reports that are focused around financial, clinical, waste/abuse, and quality of care programs and initiatives that align with the scope of work of this RFP. Experience can be as a prime or Subcontractor with State Medicaid/Health and Human Services (HHS) agencies that resulted in successful, efficient, and effective delivery of solutions and services.
- 2.2.1.4. Bidder, or Subcontractors proposed as part of the solution, has a minimum of five years of experience, within the past eight years from this RFP's issue date, with demonstrated success providing Data Lake and/or Data Analytics and Reporting System operations and maintenance activities for a payer system or health care decision support system that aligns with the scope of work of this RFP. Experience can be as a prime or Subcontractor on either public or private sector projects.
- 2.2.1.5. The Bidder or Subcontractors proposed as part of the solution, has a minimum of five years of experience, within the past eight years from this RFP's issue date, providing business intelligence or data analytic tool sets in support of operations and maintenance activities for a payer system or health care decision support system that aligns with the scope of work of this RFP. Experience can be as a prime or Subcontractor on either public or private sector projects.
- 2.2.1.6. The Bidder, or Subcontractors proposed as part of the solution, has successfully performed two or more data conversions and/or migrations from multiple, disparate, source systems into the Bidder's proposed solution within the past five years.

2.3. MDWAS Staffing

Staffing is a key component to the success of the overall module implementation and operations project. As such, the State has outlined and defined the staffing categorization and staffing requirements focused on the Key Personnel positions and Lead Personnel positions. The Personnel Position Table in RFP Section 2.3.1.4 outlines the Key and Lead Personnel positions the State views as minimally necessary to support a proposed solution, with the required qualifications defined in RFP Section 2.3.1.6. The Staffing Categorizations and Requirements are listed below:

2.3.1. MDWAS Bidder Staffing Categorization and Requirements

2.3.1.1. Key Personnel Positions

Named, required, functional and/or business, executive leadership positions that oversee all contract performance, inclusive of (but not limited to) deliverables, performance, services, warehouse, reporting, analytics, solution maintenance, and operations of the proposed solution as defined under the scope of this RFP. It is expected that the awarded Bidder must, over the base contract duration and all future contract amendments, maintain Key Personnel positions, based upon the current and anticipated demands and complexity of maintaining and operating the implemented solution while adhering to the following directives:

- a) Recommended to be full-time, equivalent (FTE) positions (but FTE count should be managed to the Bidder's discretion based upon service level expectations and business needs)
- b) Meet minimum State-approved qualifications
- c) Subject to minimum notice of vacancy/replacement
- d) May not remain vacant for more than 60 calendar days, or held on a temporary/replacement basis for more than 90 calendar days in any one-year period
- e) Subject to an optional/discretionary State review and approval for assignment and/or replacement
- f) Additional Lead Personnel positions may be proposed and/or recommended to the State by the Bidder (throughout the contract engagement); any such request must include detailed justification for the addition(s), describe general responsibilities, and propose minimum qualifications.

2.3.1.2. Lead Personnel Positions

Critical, Bidder-proposed, functional, management-level positions that provide daily support and coordination of staff that perform contract functions and responsibilities; inclusive of (but not limited to) deliverables, performance, services (e.g., program integrity), warehouse, reporting, analytics, solution maintenance, and operations of the proposed solution as defined under the scope of this RFP. It is expected that the awarded Bidder must, over the base contract duration and all future contract amendments, manage all Lead Personnel positions based upon the current and anticipated demands and complexity of maintaining and operating the implemented solution while adhering to the following directives:

- a) Recommended to be full-time, equivalent (FTE) positions (but FTE count should be managed to the Bidder's discretion based upon service level expectations and business needs)
- b) Meet minimum State-approved qualifications
- c) Subject to minimum notice of vacancy/replacement
- d) May not remain vacant for more than 60 calendar days, or held on a temporary/replacement basis for more than 90 calendar days in any one-year period
- e) Subject to an optional/discretionary State review and approval for assignment and/or replacement
- f) Additional Lead Personnel positions may be proposed and/or recommended to the State by the Bidder (throughout the contract engagement); any such request must include detailed justification for the addition(s), describe general responsibilities, and propose minimum qualifications.

2.3.1.3. General Personnel Positions

Best practice, functional and/or business, support positions that complete daily work and activities in support of contract functions and responsibilities; inclusive of (but not limited to) contract performance, deliverables, services (e.g., program integrity), warehouse, reporting, analytics, solution maintenance, and operations of the proposed solution as defined under the scope of this RFP. It is expected that the awarded Bidder must, over the base contract duration and all future contract amendments, manage all General Personnel positions based upon the current and anticipated demands and complexity of maintaining and operating the implemented solution while adhering to the following directives:

- a) At Bidder discretion and proposal for allocation/assignment to the State account
- b) At Bidder discretion and proposal for amount/count of positions (overall count should be managed to the Bidder's discretion based upon service level expectations and business needs)
- c) Vacancies, replacements (temporary or permanent) should not negatively impact or affect operational performance metrics
- d) Subject to an optional/discretionary State review and approval for assignment and/or replacement

- e) Additional General Personnel positions may be proposed and/or recommended to the State by the Bidder (throughout the Contract engagement); any such request must include detailed justification for the addition(s), describe general responsibilities, and propose minimum qualifications.

2.3.1.4. **Key and Lead Personnel Position Table**

The Staffing table below outlines the Key and Lead personnel positions that the State views as critical to support a proposed solution across the major solution components encompassed within this RFP. Bidders must propose specific individuals for all Key Personnel positions as designated in the table and must propose (at least) the minimum FTE listed for all. However, the Bidder may propose additional staff believed necessary to support the proposed solution.

Table 2: Key and Lead Personnel Position Table

Position	Key or Lead	Min. FTE	Phases	Scope of Work	Notes
Account Manager	Key (Named)	1.00 FTE, DDI – Certification .5 FTE, during M&O	Contract Execution through Turnover and Closeout	Entire Scope of Work	
DDI (Project) Manager	Key (Named)	2.00	Execution Through Certification	1.0 FTE - Data Lake 1.0 FTE – Data Analytics & Reporting	100% allocated to State of Vermont (SoV)
Technical Solution Manager	Key (Named)	2.00	Contract Execution through Turnover and Closeout	1.0 FTE - Data Lake; 1.0 FTE – Data Analytics & Reporting	100% allocated to SoV
Business Solution Manager	Key (Named)	2.00	Contract Execution through Turnover and Closeout	1.0 FTE - Data Lake; 1.0 FTE – Data Analytics & Reporting	100% allocated to SoV
Training & Documentation Manager	Key (Named)	1.00	Contract Execution through Turnover and Closeout	Entire Scope of Work	100% allocated to SoV
Business Analysis Lead	Lead	1.00	Contract Execution through Turnover and Closeout	Entire Scope of Work	100% allocated to State through certification; 50% allocated to State in Operations.
Privacy and Security Manager	Lead	0.50	Contract Execution through Turnover and Closeout	Entire Scope of Work	Can be shared resource with another vendor account, preferably an account that manages Medicaid or healthcare data.
Reporting & Visualization Manager	Lead	1.00	Contract Execution through Turnover and Closeout	1.0 FTE – Data Analytics & Reporting	100% allocated to SoV contract execution through certification; 50% allocated to SoV in Operations.

Position	Key or Lead	Min. FTE	Phases	Scope of Work	Notes
Testing Manager	Lead	1.00	Contract Execution through Turnover and Closeout	Entire Scope of Work	100% allocated to SoV contract execution through certification; 50% allocated to SoV in Operations.
Interface/ Data Manager	Lead	1.00	Contract Execution through Turnover and Closeout	Entire Scope of Work	100% allocated to SoV contract execution through certification; 50% allocated to SoV in Operations.
Program Integrity Reporting Lead	Lead	1.00	Contract Execution through Turnover and Closeout	Program Integrity Only	100% allocated to SoV

2.3.1.5. **General Personnel Position Table**

The Bidder will identify and maintain a complete set of all Key Personnel, Lead Personnel, and General Personnel job/labor categories in a labor rate card that shall be updated and resubmitted to the State with each contract amendment and/or contract renewal. Any positions that the Bidder deems of importance to the success of the project engagement, and are not listed as either a Key, Lead, or General position in the Personnel Position table, shall be included in the Bidder's proposal and added to the rate card.

Table 3: General Personnel Position Table

General Personnel Positions	Minimum FTE	Notes:
Business / Data Analyst(s)	3.00	Entry level through Senior/Experienced staff; as needed and/or proposed.
Actuary(ies)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Administrative Support Staff	2.00	Entry level through Senior/Experienced staff; as needed and/or proposed.
Clinicians (e.g., doctors, nurses, licensed clinical social workers, etc.)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Coder(s)	1.0	Entry level through Senior/Experienced staff as needed and/or proposed. Must be 100% allocated to the Project from DDI through Contract close. Additional coders can be proposed or added as needed.
Data Miner(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Data Scientist	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.

General Personnel Positions	Minimum FTE	Notes:
Epidemiologist(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Pharmacist (Licensed)	Vendor Determined	Board certified and licensed within the State of Vermont; as needed and/or proposed.
Program Manager(s)	Vendor Determined	Senior level, with experience; bid/proposed, added by Vendor/State as needed.
Programmer/Analyst(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Quality Assurance Analyst(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Reporting Analyst(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Reporting Developer(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Statistician(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Subject Matter Expert(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.
Trainer(s)	Vendor Determined	Entry level through Senior/Experienced staff; as needed and/or proposed.

2.3.1.6. **Personnel Position Experience and Qualifications**

The Bidder shall ensure that all personnel assigned by the Bidder to the performance of services under this RFP and executed contract will be fully qualified to perform the duties and responsibilities ascribed by their position.

Table 4: Key and Lead Personnel Experience and Qualifications

Position	Minimum Experience & Qualifications	Additional Key Details
Account Manager	<ul style="list-style-type: none"> ▪ A minimum of five years of experience in managing or in a key management position for a large-scale healthcare IT development project that encompasses the full system development life cycle from initiation through post implementation. ▪ Previous responsibility for managing subcontractor resources if subcontractors are included as part of this proposal. ▪ Previous experience following a standard PM methodology and using various project management tools in developing project plans, delivering tasks, and tracking timelines and resources. ▪ Project Management Institute (PMI) Project Management Professional (PMP) or generally equivalent certification. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project from Execution – Certification; Can be .5 FTE through M&O ▪ Travel may be required.

Position	Minimum Experience & Qualifications	Additional Key Details
DDI (Project) Manager	<p>Data Lake: A minimum of five years of experience implementing large-scale health care Data Management / Data Lake solutions within environments like that of SoV.</p> <p>Data Analytics & Reporting: A minimum of five years of experience implementing large-scale health care reporting and analytics solutions within environments like that of SoV.</p>	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project from execution, through implementation and certification. ▪ Travel may be required.
Technical Solution Manager	<p>Data Lake:</p> <ul style="list-style-type: none"> ▪ A minimum of five years of demonstrated experience implementing large-scale health care Data Management / Data Lake solutions within environments like that of SoV. ▪ Preferred five years of Data Management / Data Lake experience with MMIS data being the prime data source. ▪ Expert knowledge of the Contractor's solution, having implemented the solution in no less than one (1) environment at least as complex as SoV. ▪ Demonstrated experience implementing data management / Data Lake solutions within an integrated environment, employing Service Oriented Architecture (SOA) and intelligent business reporting. <p>Data Analytics & Reporting:</p> <ul style="list-style-type: none"> ▪ A minimum of five years of demonstrated experience implementing large-scale health care analytics and program integrity solutions within environments like that of SoV. ▪ Preferred five years of data analytics and reporting experience with MMIS data being the prime data source. ▪ Expert knowledge of the Contractor's solution, having implemented the solution in no less than one environment at least as complex as SoV. ▪ Demonstrated experience implementing data analytics and reporting solutions within an integrated environment, employing SOA and intelligent business reporting. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project throughout all Contract phases and engagement. ▪ Travel may be required.
Business Solution Manager	<p>Data Lake: A minimum of five years of demonstrated experience implementing large-scale health care Data Management / Data Lake solutions within environments like that of SoV. Preferred five years of Data Management / Data Lake experience with MMIS data being the prime data source</p> <p>Data Analytics & Reporting: A minimum of five years of demonstrated experience implementing large-scale health care analytics and reporting solutions within environments similar to that of SoV. Preferred five years of data analytics and reporting experience with MMIS data being the prime data source.</p>	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project throughout all Contract phases and engagement. ▪ Travel may be required.

Position	Minimum Experience & Qualifications	Additional Key Details
Training & Documentation Manager	<ul style="list-style-type: none"> ▪ A minimum of five years of experience developing and executing training programs for solutions like Contractor's solution for SoV. ▪ Working knowledge of the Contractor's proposed solution for SoV. ▪ Working knowledge of business processes associated with SoV. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project throughout all Contract phases and engagement. ▪ Travel may be required.
Business Analysis Lead	<ul style="list-style-type: none"> ▪ A minimum of five years of experience performing business analysis, including requirements elicitation and requirements life cycle management, for solutions like Contractor's solution. ▪ Working knowledge of business processes associated with Vermont Medicaid and AHS. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project throughout all Contract phases and engagement. ▪ Travel may be required.
Privacy and Security Manager	<ul style="list-style-type: none"> ▪ A minimum of three years of experience managing Privacy and Security for healthcare. ▪ Demonstrated experience and knowledge of Privacy and Security standards and best practices regarding large-scale and enterprise-level projects. ▪ Certification in privacy and security from a nationally recognized standards organization. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ May be shared resource between State engagements; minimum of 50% allocated to MDWAS Project throughout all Contract phases and engagement. Travel may be required.
Reporting & Visualization Manager	<ul style="list-style-type: none"> ▪ A minimum of five years of experience with MMIS data for use in reporting and MDW solutions. ▪ Experience with engagement with business users and developers for creation of multiple styles of reporting. ▪ Experience with visual analytics design and dashboard solutions. ▪ Experience with report specification gathering, design, and testing. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to SoV from Contract execution through certification; 50% allocated to SoV in Operations. ▪ Travel may be required.
Testing Manager	<ul style="list-style-type: none"> ▪ A minimum of five years of experience developing and executing testing programs for solutions like Contractor's solution for SoV. ▪ Experience with CMS certification process of proposed solution. Working knowledge of the Contractor's proposed solution for SoV. ▪ Working knowledge of business processes associated with SoV. 	<ul style="list-style-type: none"> ▪ Starts upon Contract Execution. ▪ Must be 100% allocated to MDWAS Project throughout all Contract phases and engagement. ▪ Travel may be required.

Position	Minimum Experience & Qualifications	Additional Key Details
Interface/ Data Manager	<ul style="list-style-type: none"> A minimum of three years of experience developing and deploying interfaces for systems like Contractor's solution. A minimum of five years of experience performing data I, data cleansing, or data conversion activities for systems similar to the contractor's solution. A minimum of three years of experience managing a data conversion or interface design project similar to the needs of SoV. Excellent written and oral communications skills. A Bachelor's Degree in an information technology or a related field is preferred but not required. 	<ul style="list-style-type: none"> Starts upon Contract Execution. Must be 100% allocated to MDWAS Project throughout all contract phases and engagement. Travel/On-site presence required for system readiness testing and implementation activities.
Data Analytics and Reporting Lead	<ul style="list-style-type: none"> Bachelor's degree in a related field with two years of related experience, or in lieu of a bachelor's degree, candidates must have six years of related combined work experience. Experience must include Data Mapping and Analytical Tools, Rule-based Mapping, Data and Data Quality Management, and Healthcare Informatics. Certified Health Data Analyst (CHDA) certification preferred, not required. • Registered Health Information Administrator (RHIA) certification preferred, not required. 	<ul style="list-style-type: none"> Starts upon Contract Execution. Must be 100% allocated to MDWAS Project throughout all contract phases and engagement. Travel may be required.

2.3.2. Staffing Requirements

The State of Vermont expects the Bidder to manage staffing and positions and must provide transparency in all aspects of staffing to align with SoV's business needs as defined in the staffing requirements in the table below.

Table 5: Global Staffing Requirements

Req. #	Global Staffing Requirements	Scope
GR-001	The Bidder will maintain a list, accessible to the State, of all individuals associated with the project, including all Bidder staff, Subcontractor staff, and any other entity that the Bidder may employ to fulfill its contractual obligations. The contents of the list will provide the following: <ul style="list-style-type: none"> a) Individual's name. b) Position. c) Business telephone number and business email address. d) Physical location of work/residence. e) Individual's position, responsibilities. f) Hours allocated, rate, and percent of time dedicated to the project. 	All Bidders
GR-002	The Bidder will maintain a State-approved Organizational Chart outlining their final staff for each project or phase for State approval. The Organizational Chart will contain a graphic depiction of the staff's hierarchy and number of staff in each organizational group or unit.	All Bidders
GR-003	The Bidder will provide the State with named staff for all Key Personnel positions as indicated in the Personnel Listing Table. The Bidder is required to propose all named staff and ensure resources are not over allocated across contracts.	All Bidders
GR-004	The Bidder will provide a variable staffing solution that delivers the experience and skill sets necessary to complete and maintain State data, reporting, and analytic needs. The staffing solution and associated	All Bidders

Req. #	Global Staffing Requirements	Scope
	experience and skill sets must account for the State's business and operational needs and the Bidder's proposed solution to support them.	
GR-005	<p>The Bidder will provide access to the following staff roles (from entry level up through senior/experienced candidates), as requested by the State, to fulfill the State's reporting, program integrity, and analytic needs:</p> <ul style="list-style-type: none"> a) Subject Matter Expert(s) b) Business Analyst(s) c) Quality Assurance Analyst(s) d) Reporting Analyst(s) e) Programmer/Analyst(s) f) Statistician(s) g) Actuary(ies) h) Pharmacist(s) (Board certified and Licensed) i) Data Miner(s) j) Data Scientist k) Epidemiologist(s) l) Program Manager(s) m) Clinicians (e.g., doctors, nurses, licensed clinical social workers, etc.) n) Administrative Support Staff o) Coder(s) 	DAR
GR-006	<p>The Bidder will provide access to the following staff roles (from entry level up through senior/experienced candidates), as requested by the State, to fulfill the State's data needs:</p> <ul style="list-style-type: none"> a) Business Analyst(s) b) Quality Assurance Analyst(s) c) Programmer/Analyst(s) d) Data Scientist g) Administrative Support Staff h) Coder(s) 	MDL
GR-007	The Bidder will provide the State with staffing allocation plans as part of all new and ongoing projects/tasks/activities/work orders subject to State review and approval.	All Bidders
GR-008	The Bidder will provide the State with comprehensive and integrated business and/or operational plans, charts, and other supporting documents as required, all of which details the Bidder's intent and effort to meet all business and/or operational functionality.	All Bidders
GR-009	The Bidder will provide the State with resumes for Key Personnel staff, as defined in the Personnel Position Table, and meet the qualifications indicated in the Key and Lead Personnel Experience and Qualifications Table, who are proposed and available for work within this engagement. Key Staff are subject to both initial and ongoing approval of the State.	All Bidders
GR-010	The Bidder will ensure vacant Key Personnel positions are filled within 30 calendar days of date of vacancy or obtain written approval by the State for extended vacancies.	All Bidders
GR-011	The Bidder will provide the State 20 business days or more advance notification and obtain the State's prior written approval of any plans to change, hire, or reassign Key Personnel Staff. The Bidder will bear the costs of changes, hires, or reassignment of Key Staff that are not preapproved by the State. The costs will be the sole responsibility of the Bidder until written approval is received from the State, including all costs incurred prior to State approval.	All Bidders

Req. #	Global Staffing Requirements	Scope
GR-012	The Bidder will notify the State within one business day of the replacement, reassignment, resignation, or termination of any Key or Lead Personnel directly supporting the awarded Contract.	All Bidders
GR-013	The Bidder will ensure vacant Lead Personnel Positions are filled within 60 business days of vacancy, within 30 business days of State request for new staff or positions or obtain written approval by the State for extended vacancies.	All Bidders
GR-014	The Bidder will replace or reassign Key, and Lead Personnel assigned to the State account for cause at the State's request.	All Bidders
GR-015	The Bidder will conduct an initial criminal background check/investigation on all new hires as well as conduct follow-up criminal investigations every two years as necessary for all assigned staff. The costs for the initial criminal background check will be the responsibility of the Bidder. If the State requests additional checks at two-year intervals, the cost will be covered as a passthrough cost.	All Bidders
GR-016	The Bidder will complete all State required trainings, both initial/on-boarding trainings and annual refreshers, as requested by the State.	All Bidders
GR-017	The Bidder's staffing solution will only include staff located within the continental United States (CONUS).	All Bidders
GR-018	The Bidder's staffing solution will maintain staff schedules for all off-site, remote staff based upon an Eastern Time Zone schedule.	All Bidders
GR-019	The Bidder will ensure that all licensed staff maintain current licensure in their respective fields with no State or Federal sanctions.	All Bidders

2.4. MDWAS Bidder Global Engagement and Project Administration Requirements:

Global Engagement and Project Administration activities are comprised of several key administrative business areas, all of which establish a foundation to manage all project activities and tasks and work together to fulfill SoV's vision for the successful operation of the MDWAS, as well as the Medicaid Enterprise. The categories depicted below outline the business and administrative requirements that the State views as key to the success of all project phases.

The Global Engagement and Project Administration solution must be responsive to the overall complexity and operations of a project existing within a multi-Bidder, modular environment such as it exists in the SoV. This solution must convey the framework, vision, and approach that, at a minimum, incorporates services for initiating, planning, executing, monitoring, and controlling all aspects of the project from the DDI Phases through Turnover and Closeout.

The State expects an overall Global Engagement and Project Administrative approach that adheres to recognized industry standards and principles for both project management and quality control. The Bidder's proposed approach and methodology must embody the essence and directives derived from these principles and standards and apply them across the spectrum of the project as they relate to all required project documents, plans, and deliverables.

The following Global Engagement and Project Administration categories include similarly grouped, comprehensive requirements that relate to the overall project. The included business areas and the related requirements within each are listed within each section. The Bidder's proposed solution should address and solve for the requirements included, as they are the framework under which all project activities and work is governed. However, should a Bidder not be able to meet the requirements listed, the State requests a justification as to why the requirement(s) cannot be met. In meeting these requirements, Bidders are reminded that they are to be applied and managed universally throughout the project timeline, phases, and work, unless explicitly amended by the State to fit or address a specific problem, issue, or failure.

Bidders must provide clear, comprehensive, descriptive, and cohesive solutions to meet the business needs listed throughout this section, as part of Attachment C - State of Vermont Bidder Response Form,

Part 2 and Part 4. The Bidder is required to provide narrative responses in reference to this Section of the RFP that clearly describe the proposed solution’s ability to meet the requirements as stated within this section and the resulting Contract.

2.4.1. Project and Requirements Management

Project and Requirements Management establishes the foundation upon which a successful project is built. The Project and Requirements Management framework support the Contract from initiation through closeout and must continuously address the challenges represented within the MDWAS, as well as dependencies for the Bidder in a multi-Bidder, enterprise environment. The State envisions these defined areas as critical, foundational elements to a collaborative, transparent, and fully engaged relationship with the Bidder, and as such, these areas must be fully supported and maintained for a successful outcome.

Table 6: Project and Requirements Management Requirements

REQ ID	Project and Requirements Management Requirements	Scope
GR-020	The Bidder will maintain a State-approved project management approach that supports collaborative and consistent implementation of industry recognized and aligned project controls and system development standards that will address the challenges represented within a multi-Bidder, integrated State Medicaid Enterprise solution.	All Bidders
GR-021	The Bidder will adhere to all applicable State Medicaid Enterprise-Wide integrated project plans and Deliverables, as approved by the State, which orchestrate and direct the activities of all Bidders engaged in work under the scope of this RFP. The list of deliverables and associated due dates are present in RFP Section 2.5 . Associated deliverable requirements are listed within their respective business area within RFP Sections 2.5.1 – 2.5.23 .	All Bidders
GR-022	The Bidder will collaborate with all State internal/external partners and Bidders to create, maintain, update, and submit for State approval, coordinated Project Deliverable documents (as referenced in RFP Section 2.5). which adhere to Industry Best Practices within required timeframes. The Bidder will review and update all Project Deliverables as necessary to address system changes, at a minimum, on an annual basis prior to the beginning of the Contract year.	All Bidders
GR-023	The Bidder will obtain State approval for all Project Deliverables and adhere to the following: a) For each Project Deliverable, the Bidder will prepare and submit a Deliverable Expectation Document (DED) that includes an outline and expected reviewers for State review before a Project Deliverable is developed and submitted to the State b) Conduct formal Project Deliverable reviews with the State prior to receiving approval as prescribed by the State. The State will provide input into all Project Deliverable designs and contents c) Conduct, upon request by the State, review meetings to clarify State findings on rejected Project Deliverables d) Perform all revisions to Project Deliverables before the Project Deliverable is resubmitted to the State for subsequent review e) Meet accepted standards of practice adopted by the State for final versions of Project Deliverables and milestones Submit, at the discretion of the State, interim Project Deliverables to the State for their advance review to promote schedule progress without resetting the Project Deliverable schedule.	All Bidders
GR-024	The Bidder will update and maintain all Project Deliverables as outlined within the Deliverable specific requirements in this and all RFP sections. As Modules are added to the State Medicaid Enterprise, the State will	All Bidders

REQ ID	Project and Requirements Management Requirements	Scope
	require the Bidder to integrate Project Deliverables, when applicable, with other enterprise Bidders as requested by the State.	
GR-025	The Bidder will prepare and deliver to the State for approval a detailed (DEL-1, Section 2.5.1) Project Management Plan (PMP) for the overall MDWAS project, for State approval that, at a minimum, conforms to industry project management standards and sufficiently addresses the challenges represented within a multi-Bidder, integrated systems solution. The Project Management plan will govern overall project management for all phases of the project.	All Bidders
GR-026	The Contractor shall follow project management methodologies as directed by the State that are consistent with the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK) Guide and/or Agile project management. Contractor staff will complete the activities recognized in the EPMO project lifecycle (Project Process Enterprise Project Management Office (vermont.gov)) and will produce project deliverables according to same, using Azure DevOps and Microsoft Office Products in v2007 or newer (Word, Excel, Project, Visio, etc.) and Adobe PDF, or other formats as acceptable to the State.	All Bidders
GR-027	The Bidder will ensure project management processes and procedures are flexible to accommodate different sized maintenance and modification projects throughout the life of the Contract.	All Bidders
GR-028	The Bidder will include project risk and issue management processes as part of their project management approach.	All Bidders
GR-029	The Bidder will include budget management processes as part of their project management approach.	All Bidders
GR-030	The Bidder will use MS Project management software that aligns with versioning used by the State, for managing analysis, configuration, and deployment of projects that support International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC)/Institute of Electrical and Electronics Engineers (IEEE) 16326:2 9 and ISO 215 :2 2 standards.	All Bidders
GR-031	The Bidder will work collaboratively with the State and all State partners to support all State-approved integrated State Medicaid Enterprise-Wide Project Deliverables and plans.	All Bidders
GR-032	The Bidder will develop procedures to share all project information in a timely manner across the organization to reduce siloes and improve processes and procedures throughout the State Medicaid Enterprise.	All Bidders
GR-033	The Bidder will establish and maintain a State-approved (DEL-2, RFP Section 2.5.2) Project Management Repository (PMR) that is integrated with the State documentation and software development applications while providing controlled secure access to State-authorized Stakeholders.	All Bidders
GR-034	The Bidder will use the PMR, with advanced search capabilities, as a comprehensive repository of documents and other materials related to the project. The Bidder is required to update and version the content of these items, so the information is current. Items to incorporate include: <ul style="list-style-type: none"> a) Contact/Phone Lists b) Business Process Models c) Workflow Designs d) RFP and Proposal Documents with requirements and proposal responses linked to the Requirements Traceability Matrix (RTM) for requirements validation e) Design decisions linked to RFP requirements, proposal responses, and RTM data f) Detailed design documents (DDD), test results, and other Deliverables 	All Bidders

REQ ID	Project and Requirements Management Requirements	Scope
	<ul style="list-style-type: none"> g) Schedules and calendars h) Microsoft Project work plan i) Minutes and agendas j) Issue tracking tool and other documents k) Policy documentation l) System documentation m) Change orders and related documents n) All Deliverables as listed in RFP Section 2.5 o) Additional items learned through the project initiation and planning process, or other items related to the project over the lifetime of the system. 	
GR-035	For non-COTS based products and customizations to SaaS solutions, the Bidder will establish and execute a State-approved Software Development Life Cycle (SDLC) and schedule as part of the Project Management Plan for managing and completing all State-approved work.	All Bidders
GR-036	The Bidder will cooperate to adapt all SDLC artifacts and processes to align with the enterprise standards set forth by the State.	All Bidders
GR-037	For non-COTS based products and customizations to SaaS solutions, the Bidder will collaborate with the State to provide a (DEL – 8, RFP Section 2.5.8) Business Design / System Design Document (BD/SDD) for the overall MDWAS project, that, at a minimum, complies with industry project management and business analyst standards and sufficiently addresses the challenges represented within a multi-Bidder, integrated system solution.	All Bidders
GR-038	The Bidder will update the BD/SDD throughout the Contract to incorporate all changes to the overall business design.	All Bidders
GR-039	The Contractor will adhere to International Institute for Business Analysis (IIBA) Guide to Business Analysis Body of Knowledge (BABOK) v3 practices for business analysis tasks and outputs, as proposed by the Contractor and approved by the State. This includes but is not limited to collaborating with the State to elicit business and stakeholder requirements at sufficient detail to ensure the solution meets the needs of the State.	All Bidders
GR-040	For products requiring configuration and/or customization, the Bidder will provide a (DEL – 7, RFP Section 2.5.7) Business Analysis Plan (BAP), for the overall MDWAS project that, at a minimum, complies with IIBA BABOKv3 standards and sufficiently addresses the challenges represented within a multi-Bidder, integrated system solution. The BAP will describe how the Bidder system meets the RFP requirements and CMS requirements, as well as how the BAP serves as the medium used for transforming the business-oriented architectures into the technical oriented BD/SDD.	All Bidders
GR-041	The Bidder will propose, for State approval, a comprehensive, robust, requirements management tool that can integrate with the SoV preferred requirements management/software development tool, Azure DevOps (ADO).	All Bidders
GR-042	The Bidder will update the BAP throughout the Contract to incorporate all changes to the overall project requirements.	All Bidders
GR-043	For any proposed solution, the Bidder will collaborate with the State to provide a (DEL-12, RFP Section 2.5.12) Data Integration / Interface Design and Control Document (DIID&CD), for the overall MDWAS project, that at a minimum, complies with industry project management and business analyst standards, and includes detailed data mapping/data flow documentation/diagrams for all source data systems and integrated systems/sub-systems as well as sufficiently addresses the challenges represented within a multi-Bidder, integrated systems solution.	All Bidders

REQ ID	Project and Requirements Management Requirements	Scope
GR-044	The Bidder will update the DIID&CD throughout the Contract to incorporate all changes to the overall system design.	All Bidders
GR-045	The Bidder will collaborate with the State to provide a high level (DEL – 9, RFP Section 2.5.9) Implementation Plan (ImP) that outlines the methodical approach for the design, development, implementation, of all technology and services in accordance with the scope that is proposed.	All Bidders

2.4.2. Contract Management

Contract Management is similar and parallel to the responsibilities of project management, especially throughout the Contract execution, planning, and transition phases. However, the difference subsists within the Contract oversight, performance, compliance, and governance activities that are associated with the administration of the overall Contract. Additionally, Contract Management is critical to the organizational, relationship, communication, and financial management activities with the State and its Stakeholders. Inherent within all Contract Management requirements and expectations is the establishment of a true collaborative environment in which the State and the Bidder establish an open exchange of communication to manage the Contract and to resolve potential issues. The State gives specific attention to the creation and computation of all invoicing activities, incorporation of necessary changes or modifications in the Contract, ensuring both parties meet or exceed expectations, and are actively interacting to achieve the overall project objectives.

Table 7: Contract Management Requirements

REQ ID	Contract Management Requirements	Scope
GR-046	The Bidder will facilitate meetings and provide reporting to communicate Contract status on a State-approved frequency.	All Bidders
GR-047	The Bidder will contract with a third-party agency to perform a minimum of one annual audit as requested by the State (e.g., annual risk assessment) in accordance with State specifications.	All Bidders
GR-048	The Bidder will provide information and data as requested by the State to fulfill requests for litigation, subpoenas, open record requests or other legal actions at no cost to the State.	All Bidders
GR-049	The Bidder will initiate State requested and approved audit activities within five business days of request by the State or another date agreed to by the State.	All Bidders
GR-050	The Bidder will maintain State-approved Contract management notifications and coordination procedures as presented in DEL – 16, RFP Section 2.5.16 the Communications Management Plan (ComMP) to be utilized in communicating with the State regarding system, operational, or Contract related issues and implementing necessary coordination activities across Bidders, as necessary.	All Bidders
GR-051	The Bidder will complete and submit an Operational Trouble Report for physical documentation of all reported system and/or non-system-based problem, defect, or deficiency to the State.	All Bidders
GR-052	The Bidder will maintain a State-approved process, structure, and format for all invoicing activities and documents. Invoicing activities will include electronic routing and workflow capabilities, detail, and summary level reporting, and supporting documentation. The Bidder will immediately correct, and reissue invoices submitted with incorrect data and will provide the ability to apply credits to an invoice in the instance of incorrect billing.	All Bidders
GR-053	The Bidder will correct and reissue invoices within 20 business days of State notification of necessary correction. The Bidder will maintain a	All Bidders

REQ ID	Contract Management Requirements	Scope
	minimum of a 95% accuracy rate on all initial invoices submitted to the State, and a 100% accuracy rate on all resubmitted invoices.	
GR-054	The Bidder will maintain a State-approved signoff authority process for verbal and written communication of decisions, approvals, and work requests that is documented and archived in a highly accessible, secure, central location.	All Bidders
GR-055	The Bidder will update State sign-off authority listings within one business day of receipt.	All Bidders
GR-056	The Bidder will maintain a time and activity/task reporting system for reporting of all Bidder/Bidder and Subcontractor staff time for use in invoicing the State and generating required cost reporting activities.	All Bidders
GR-057	The Bidder will generate and provide a project specific and monthly report in Excel format to the State displaying a list of all personnel (not by position) assigned to the State account during the invoice period, including all supplemental staff assigned to work on the State account. The report will indicate the percentage of individual FTE invoiced to base and add-on activity for each employee and list the employee's job description, role, and assigned base or add-on activity or project name.	All Bidders
GR-058	The Bidder will generate monthly personnel invoicing reports one week following the end of the invoice period.	All Bidders
GR-059	<p>The Bidder will only bill the State for training and orientation hours associated with onboarding of new staff in accordance with the staffing resource type. Example situations include:</p> <ul style="list-style-type: none"> a) Staff dedicated to maintenance projects will have all training and onboarding costs covered under the base Contract as maintenance costs. b) Staff dedicated to modification projects will not bill toward modification hours for the first two weeks after their start date while the Bidder provides onboarding and training. Training and onboarding will occur within the first two weeks after their start date. These costs will be considered maintenance. c) Staff dedicated to projects in which additional funding has been obtained by the State will not bill toward the additional funding project for the first two weeks after their start date while the Bidder provides training and onboarding. Training and onboarding will occur within the first two weeks after their start date. These costs will be considered maintenance. d) Staff dedicated to State-approved staff augmentation services will not bill toward the approved position for the first week after their start date. Training and onboarding will occur within the first week after their start date. These costs will be considered maintenance. Bidder will provide all onboarding activities and the State will provide position specific training. 	All Bidders
GR-060	The Bidder will ensure that only dedicated project time will be invoiced toward modification hours or additional project funding sources. All administrative leave (including sick/vacation), training, and leave time remains the responsibility of the Bidder under maintenance.	All Bidders
GR-061	The Bidder will provide calculated cost allocations, the processes and methodology, to support claims for Federal Financial Participation (FFP) across multiple programs, agencies, and departments. The Bidder will provide the State with documentation to support wages, fringe benefits, and other expenditure items in accordance with these regulations. The Bidder will develop these requirements collaboratively with the State. The Supplier will update and provide the approach/methodology to the cost	All Bidders

REQ ID	Contract Management Requirements	Scope
	allocation calculations to the State for approval on an annual basis, or on a frequency determined by the State.	
GR-062	The Bidder will maintain a State-approved process to enable immediate removal, with just cause or reason, both physical and virtual access to systems and facilities for Bidder or Subcontractor employees deemed unfit to continue employment.	All Bidders
GR-063	The Bidder will notify the State no later than one hour after immediate termination of employee.	All Bidders
GR-064	The Bidder will make all Subcontractor agreements available to the State upon request. For any Subcontract, there must be a designated primary contact who is a member of the Subcontractor's staff and who is accessible to the State. This individual's name and contact information must be provided to the State when the Subcontract is executed. The State will notify Bidder prior to any communication with Subcontractor staff.	All Bidders
GR-065	The Bidder will be held responsible and are subject to all Corrective Action Plans (CAPs), penalties, and withholds due the State, attributable to subcontractor performance issues and/or non-performance. The Bidder will be responsible/accountable for any/all subcontracted work assigned and approved for assignment by the State; and are responsible for enforcement and oversight of subcontractors and their compliance with all State and Federal contractual terms/provisions as included under this RFP and any resulting contractual award.	All Bidders
GR-066	Upon State request, the Bidder will provide staff and resources to participate on behalf of the State at national organizations and conferences. The Bidder will secure State approval prior to any representation or presentation of documentation related to any State program, including any local, State, national conferences, or other public or private forums.	All Bidders
GR-067	The Bidder will provide a monthly summary report of all representation/presentation activities for the prior month.	All Bidders
GR-068	The Bidder will comply with all State-approved Deliverables (listed in RFP Section 2.5), plans, processes, and Contract award requirements, terms and conditions throughout the project scope and engagement.	All Bidders
GR-069	The Bidder will adhere to, follow, and actively collaborate with all State Bidders on all the currently approved versions of the Contract Deliverables (listed in RFP Section 2.5), as they relate to or are a result of any system or non-system based changes, modifications, or maintenance activities, efforts, tasks, or projects during the life of the Contract procured under the scope of this RFP.	All Bidders
GR-070	The Bidder will be responsible for all joint meeting materials, including agendas, minutes, supporting materials, and posting and distribution of material for review and approval.	All Bidders
GR-071	Upon State request, the Bidder will procure the services of a State-approved third-party, independent, autonomous auditor (e.g., annual security risk assessment) requiring independent auditor services.	All Bidders
GR-072	The Bidder will provide State documentation of all requested/required audit results, develop corrective action plans for deficiencies, and hold an exit conference with State-designated Stakeholders, if requested. Bidder will correct all deficiencies identified through the course of an audit as part of maintenance.	All Bidders

REQ ID	Contract Management Requirements	Scope
GR-073	The Bidder will be available to attend all meetings with State staff and partners, as requested and required by the State. Special travel provisions, restrictions, or considerations will be collaboratively discussed and agreed upon between the State and the Bidder.	All Bidders
GR-074	The Bidder will maintain complete and detailed records of all meetings related to the Contract, SDLC documents, presentations, project artifacts and any other interaction and post and maintain these artifacts in the PMR within five business days of the meeting or interaction.	All Bidders
GR-075	The Bidder will develop and implement a State-approved process for identifying, documenting, and obtaining a State decision on all Contract scope additions or modifications. Scope additions or modifications may be identified by any party but must be approved by both the State and the Bidder in writing as a Contract modification per RFP Section 3.8 . Unless explicitly addressed in the Contract modification, all Contract terms, conditions, and RFP requirements will apply to any scope added or modified.	All Bidders
GR-076	The Bidder will provide a dedicated, qualified on-call resource who will be available 24 hours per day / 7 days per week for the ongoing operation, mitigation, and correction of critical incidents.	All Bidders
GR-077	The Bidder will maintain State-approved risk and issue management process/plan (DEL – 6, RFP Section 2.5.6) and procedures, including ongoing education and training of user support staff.	All Bidders
GR-078	The Bidder will maintain a State-approved Corrective Action Plan (CAP) process and template as defined under (DEL – 14, RFP Section 2.5.14) the Quality Management Plan (QMP) to be used for the identification, documentation, and resolution of any identified issues as they relate to performance requirements, Deliverable due dates, and Service Level Agreements contained within the scope of the RFP. Once approved, the Bidder will implement and utilize the State-approved CAP to resolve all identified and reported issues.	All Bidders
GR-079	The Bidder will take an active role in identifying, documenting, and performing proactive self-reporting and CAPs for all State Medicaid Enterprise-Wide services contained under the scope of this RFP, as detailed within (DEL – 14, RFP Section 2.5.14) the Quality Management Plan (QMP), and when directed by the State.	All Bidders
GR-080	The Bidder will submit CAPs within 10 business days from discovery of non-compliance.	All Bidders
GR-081	The Bidder will perform and complete all activities and testing as described and within the timelines prescribed in the State-approved CAP.	All Bidders
GR-082	The Bidder will provide appropriate system access and/or a walkthrough of any Bidder facilities and operations as directed by the State to facilitate external and internal audits.	All Bidders
GR-083	The Bidder will, throughout all phases of this Contract, adhere to 42 CFR 434.6(5), which allows evaluation by CMS and HHS, through inspection or other means, of the quality, appropriateness, and timeliness of services performed under this Contract.	All Bidders
GR-084	The Bidder will collaborate with the State and State-identified partners to advance and implement efficiencies (as detailed in the QMP) and improve MITA levels for both individual systems/MDWAS, and the overall State Medicaid Enterprise.	All Bidders

2.4.3. Quality Management

Quality Management focuses on the utilization of industry recognized quality improvement and management principles and standards to achieve and maintain quality system and operational services in accordance with State-approved performance metrics and benchmarks. The Quality

Management requirements necessitate the establishment of a Quality Management Plan (QMP) that outlines and guides all quality management activities during all Contract phases, including quality control and quality improvement resolution. Quality Management requires a proactive approach from the Bidder in identifying, addressing, and maintaining quality improvement controls, within the MDWAS and their interaction and dependencies to the Medicaid Enterprise, coupled with reporting on issues and the resulting outcomes. The Bidder must actively collaborate with the State and all other Bidders/partners to champion and implement improvement and quality control initiatives to maintain quality within the MDWAS and across their connections to the Medicaid Enterprise.

Table 8: Quality Management Requirements

REQ ID	Quality Management Requirements	Scope
GR-085	The Bidder will collaborate with the State to develop and provide a (DEL – 14, RFP Section 2.5.14) QMP for review, annual update, and approval by the State. The QMP will define the State accepted level of quality among identified key performance indicators, while describing how the Bidder will ensure this level of quality in its Deliverables and work processes. Quality management activities outlined within the plan will include the following: a) Quality objectives b) Key project deliverables and processes to be reviewed for satisfactory quality level c) Quality standards d) Quality control and assurance activities e) Quality roles and responsibilities f) Quality tools g) Defines plan and process for reporting quality control and assurance problems h) Defines the Corrective Action Plan (CAP) framework and processes.	All Bidders
GR-086	The Bidder's QMP will conform to ISO ,Quality Management System (QMS), Total Quality Management (TQM), SSAE18, and Continuous Quality Improvement principles and standards, and sufficiently address the challenges represented within a multi-Bidder, integrated systems solution.	All Bidders
GR-087	The Bidder will actively collaborate and work with the State and all State identified Bidders/partners to achieve and maintain quality system and operational services in accordance with State approved performance metrics and benchmarks.	All Bidders
GR-088	The Bidder will implement State approved performance improvements, in a method and manner that meets or exceeds ISO, QMS, TQM, SSAE16, and Continuous Quality Improvement principles and standards, for all State Medicaid Enterprise Wide services contained under the scope of this RFP.	All Bidders
GR-089	The Bidder will lead, coordinate, and be responsible for all quality assurance management, quality assurance, and quality assurance testing meetings as requested and required under the QMP and/or by the State at a mutually agreed upon frequency.	All Bidders
GR-090	The Bidder will assign a dedicated resource to lead the quality assurance staff and their work to execute process improvements, across the MDWAS that are consistent with Lean Six Sigma process principles or other ISO, QMS, TQM, SSAE16, and Continuous Quality Improvement principles and standards.	All Bidders
GR-091	The Bidder will provide adequate and dedicated staff to implement, monitor, and address all quality assurance and improvement activities required under the QMP as it relates to MDWAS solutions and in support of the successful operation and performance for all State Medicaid	All Bidders

REQ ID	Quality Management Requirements	Scope
	Enterprise-Wide systems and services contained under the scope of this RFP.	
GR-092	The Bidder will provide staff to perform regular quality assurance monitoring to ensure that the Bidder meets all RFP specified and contractual responsibilities.	All Bidders
GR-093	The Bidder will take a proactive role in identifying and addressing quality control issues within the overall MDWAS solution and in support of the State Medicaid Enterprise-Wide operations in the effort to meet or exceed performance benchmarks/metrics for the State, as required by CMS and/or requested/detailed and outlined in the current version of the State approved QMP.	All Bidders

2.4.4. Performance Management

Performance Management supports the monitoring and management of all system and operational performance against Key Performance Indicators (KPIs). The foundation of Performance Management must include a methodical approach to measure performance criteria against the defined Bidder Service Level Agreements (SLAs). The State has established an expectation for continuous improvement of system and operational performance as part of the modularization of the Vermont Medicaid Enterprise. In this, the Bidder will work collaboratively with the State to assess performance and make necessary modifications to KPIs and SLAs as system and operational processes evolve and advancements in MITA maturity levels can be achieved.

Table 9: Performance Management Requirements

REQ ID	Performance Management Requirements	Scope
GR-094	The Bidder will cooperate with the State to provide a (DEL – 22, RFP Section 2.5.22) Performance Management Plan (PerfMP) that details the Bidder's methodical approach and detailed steps to identify, capture, measure, monitor, and report the technical and operational (and all State-approved and CMS required) performance criteria to be used as KPIs measures against the Bidders required SLAs.	All Bidders
GR-095	The Bidder will conduct regularly scheduled reviews to assess performance against KPIs and SLAs.	All Bidders
GR-096	The Bidder will review all State-approved and CMS required KPIs and SLAs with the State, minimally on a monthly basis, or as requested by the State.	All Bidders
GR-097	The Bidder will, in collaboration with the State, develop, review, and maintain, all State-approved and CMS required, KPIs and SLAs as advancements of the MITA principles and operational process maturity occur based upon the ongoing reviews of these measurements.	All Bidders
GR-098	The Bidder will provide and maintain a performance dashboard that captures performance metrics (with drilldown capabilities to supporting data) that can be accessed, exported for CMS reporting, or reported on, as requested by the State, in a medium and format approved by the State. The dashboard and subsequent performance metrics reporting will include performance summaries, such as: <ul style="list-style-type: none"> a) KPIs and related service levels targeted vs. actual results b) KPIs and related service levels prior period report comparisons c) KPIs and service levels reported as non-compliant d) KPI corrective action plans (CAP), CAP details, impacts to other Modules/systems and estimated compliance date e) KPI resolution date and detailed corrective status for all CAP resolutions. 	All Bidders

REQ ID	Performance Management Requirements	Scope
GR-099	The Bidder will provide the performance summary report within the first 10 business days following the last business day of the month prior.	All Bidders
GR-100	The Bidder will adhere to the project's (DEL – 10, RFP Section 2.5.10) Change Management and Modification Pool Plan (ChMP) and subsequent change control processes as agreed to with the State for any modifications to the KPIs or SLAs.	All Bidders

2.4.5. Change Management & Modification Pool

Change Management is a systematic approach to governing any changes made to business and technical aspects of a project over the course of the Contract. The overall purpose and function of change management is to ensure that proposed/nominated changes go through a systematic and defined process to assess, prioritize, and document the circumstances, needs, probable impacts, and approval/denial of those changes. The Change Management process is deeply entrusted and rooted within the overall Change Management plan that incorporates all business and technical change processes, including all maintenance and modification work. At the heart of Change Management is a project specific Change Management plan/process facilitated by the MDWAS Bidder, in addition to the active participation in the overall Medicaid Enterprise Change Management process. The Medicaid Enterprise Change Control Board consists of representatives from all module vendors to discuss and plan all changes. As the complexity of the Vermont Medicaid Enterprise evolves, the importance of the Change Control Board to monitor all changes across the enterprise also grows.

2.4.5.1. **Modification Pool:** The State expects the Modification Pool to cover modifications that change (e.g., broaden or remove) the scope of the MDWAS in terms of data ingestion or complex reporting data mart builds. Such activity should first go through the Change Management process to be reviewed by the Change Control Board, so that nominated changes can be evaluated and determined that the change is reflective of a Scope of Work “change” or if the nominated change is to be considered a Modification Pool Hour project. The Change Management Principles that define the three types of changes that can be applied to the MDWAS are:

2.4.5.2. **Modification Principles:**

- a) Changes to existing MDL data ingestion processes
- b) Changes to existing reporting processes
- c) Changes to data extraction processes

2.4.5.3. **Enhancement Principles:**

- a) Longer project scope (months)
- b) Potential funding match for new functionality
- c) Impact to infrastructure Incorporation of a new data source

2.4.5.4. **Defect Principles:**

- a) Changes to existing functionality to meet defined requirements

2.4.5.5. **Modifications Scenarios:** The following are standard modification scenarios that would count towards the pooled MDWAS modification hours. The Bidder is expected to work collaboratively with the State to determine how ad hoc requests for support are addressed; either through usage of base MDWAS staff, or whether the ad hoc request for support can be handled/completed through the modification pool hours. It is important to note that the following list is not inclusive of ad hoc reporting support.

- a) Alteration to an existing report; changes to the report such as elements included, formatting, and documentation.
- b) Creation of a new report. The development of a new report to be published to the report library.

- c) Adding a new data element to the MDL, either via ingestion from a source system or via a new calculation performed against existing elements.
- d) Creation of a new data mart which includes allocating storage and creating the data refresh process.
- e) Modification of an existing data mart either changing the dimensions or adding additional data attributes.
- f) Creation of a new data visualization report.
- g) Modification of an existing data visualization report either by changing the presentation layer and/or altering the data ingestion and storage processes.
- h) Creation of a new dashboard.
- i) Modification of an existing dashboard either by changing the presentation layer and/or altering the data ingestion and storage processes.
- j) Change to an existing data extract file process for exporting data sets from the ADW.
- k) Creation of a new data extract file process for exporting data sets from the ADW.
- l) Time expenditure associated with performing change management and quality reviews of modified components.

Table 10: Change Management and Modification Pool Requirements

REQ ID	Change Management and Modification Pool Requirements	Scope
GR-101	The Bidder will participate in, upon Contract execution, a collaborative and jointly staffed (to include State staff and all Module-based Bidder staff) Change Control Board that will create and govern the processes to review, approve, prioritize, complete, account for, and implement all identified, proposed, anticipated, expected, or unexpected contractual, technical, or system maintenance/modification activities within the scope of the Bidder's Contract.	All Bidders
GR-102	The Bidder will collaborate with the State, in accordance with the State change management structure and governance, to provide a (DEL – 10, RFP Section 2.5.10) Change Management and Modification Tool Plan (ChMP) for State approval that, at a minimum, conforms to industry project management standards and sufficiently addresses the Bidder's methodology for effective change management within a multi-Bidder, integrated systems solution.	All Bidders
GR-103	The Bidder will provide adequate staff to complete, support, and consult with the State regarding all approved integrated change management forms and processes as these forms and processes relate to the management, oversight, development, and/or implementation of activities in all phases of the MDWAS project.	All Bidders
GR-104	The Bidder will coordinate, facilitate, and document (at the State's discretion) a meeting with the State each Contract year, to review the annual maintenance and modification schedule and provide all documentation within 10 business days of the completion of the meeting.	All Bidders
GR-105	The Bidder will develop and submit to the State, for approval, suggested revisions and edits to all affected business requirement(s) that are a result of any approved system changes, maintenance, modification, or other work request efforts to eventually be incorporated into contractual changes to the Contract within 10 business days prior to implementation of the change that will affect business requirements.	All Bidders
GR-106	The Bidder will adhere to a State-approved process for receiving, initiating, and executing all data, reporting, and analysis work/change requests from the State that: <ul style="list-style-type: none"> a) Acknowledges receipt of the request within one business day b) Provides proposed dates for delivery of Deliverables within three business days c) Approved process must account for negotiable deadlines for on demand/priority requests. 	All Bidders

REQ ID	Change Management and Modification Pool Requirements	Scope
GR-107	The Bidder will utilize all State-approved Change Management and Modification Tool Plan (ChMP) and Change Control Board related materials to manage change effectively within a multi-Bidder, integrated systems solution.	All Bidders
GR-108	The Bidder will actively collaborate with all State-approved Bidders and Subcontractors under the direction of the State Change Control Board to manage change effectively within a multi-Bidder, integrated systems solution as it relates to any system or non-system-based changes, modifications, or maintenance activities, efforts, tasks, or projects.	All Bidders
GR-109	The Bidder will cooperate to provide to a State designated entity a monthly report, or as requested by the State, to show all current systems work.	All Bidders
GR-110	The Bidder will integrate their Change Control data entry and work order tracking system for completion, archival, submittal and approval of all Change Control related processes and materials with the State enterprise Change Control system.	All Bidders
GR-111	The Bidder will perform, document, and implement all approved work requests per the priorities, quality standards, and approval/completion/close-out processes established by the Change Control Board and the State.	All Bidders
GR-112	The Bidder will actively pursue, engage, and collaborate with the State to identify system/non-system-based changes, maintenance, or modification efforts that will provide a streamlined, organized, and/or efficient effect/impact on MDWAS systems or operations.	All Bidders
GR-113	The Bidder will enable the categorization of all changes to the system as one of the following and will be reviewed, approved, and prioritized by the State, in accordance with the State Change Control Process: a) Maintenance projects b) Modification pool project (e.g., Specification Orders) c) Modification add-on projects (e.g., Contract Amendment) d) Defect	All Bidders
GR-114	The Bidder will provide separate staffing configurations for maintenance (including defects) work, modification pool work, and modification add-on work that will allow for prompt response, performance, oversight, development, implementation, testing, and maintenance of all active, planned/upcoming, and/or newly proposed/approved work efforts as they relate to the continuous effective and efficient operation of the Bidder's system solutions.	All Bidders
GR-115	The Bidder will establish and maintain distinct teams with appropriate business area knowledge to separately handle all activities approved by the State and in accordance with the approved SDLC. Individuals assigned to specific work teams will not engage in other work assignments without prior approval from the State. This includes dedicated maintenance staff, modification staff, and additional staff resources paid for by the State.	All Bidders
GR-116	The Bidder will inform and seek State approval prior to any configuration change in the overall State-approved staffing configuration (e.g., maintenance staffing performing modification work).	All Bidders
GR-117	The Bidder will generate and distribute (at a minimum) a monthly change, maintenance, and modification staffing report that provides resource level detail concerning modification efforts of all proposed, active, and newly completed modification efforts/projects.	All Bidders

REQ ID	Change Management and Modification Pool Requirements	Scope
GR-118	The Bidder will produce, update, and submit to the State, for review and approval, documentation for each project per the Change Management and Modification Tool plan and in cooperation with the State and other Module Bidders. Documentation will be consistent with the project effort and can be negotiated with the State.	All Bidders
GR-119	The Bidder will utilize and execute a deployment/implementation and release management process for all phases of the MDWAS project that aligns with State Change Management process, including quality assurance standards, and approval/completion/close-out processes established by the Change Control Board and the State, regardless of the phase, size, cost, and/or urgency of the project.	All Bidders
GR-120	The Bidder will provide yearly Modification Hour pools to the State to enable required and approved modification projects to occur. The State seeks a collaborative solution from the Bidder that will meet predetermined needs, as listed above, and allow for the flexibility to choose and activate projects as approved through the Change Control Board and State Project Managers. This solution must account for the following: a) A DDI pool of ten thousand hours for modifications activities that will be included in the DDI costs of the Contract, to be used on a phased basis at State discretion and approval throughout all DDI Phases. b) A pool of twenty thousand hours for modification activities will be included for each Operations Phase year of the Contract; fifteen thousand hours will be included in the fixed price for each Operations Phase year of the Contract, and five thousand hours will be included in a variable price for each Operations Phase year of the Contract.	DAR
GR-121	The Bidder will provide yearly Modification Hour pools to the State to enable required and approved modification projects to occur. The State seeks a collaborative solution from the Bidder that will meet predetermined needs, as listed above, and allow for the flexibility to choose and activate projects as approved through the Change Control Board and State Project Managers. This solution must account for the following: a) A DDI pool of 5,000 hours for modifications activities that will be included in the DDI costs of the Contract, to be used on a phased basis at State discretion and approval throughout all DDI Phases. b) A pool of 10,000 hours for modification activities will be included for each Operations Phase year of the Contract; 7,000 hours will be included in the fixed price for each Operations Phase year of the Contract, and 5,000 hours will be included in a variable price for each Operations Phase year of the Contract.	MDL
GR-122	The Bidder will provide the necessary staffing levels to utilize all modification hours available within a given year. The State retains the right to use and allocate the pool of modification hours at its sole discretion.	All Bidders
GR-123	The Bidder will allow the State to purchase additional modification hours at any time during a Contract Year using the negotiated Rate Card for the applicable Contract Year of requested purchase.	All Bidders
GR-124	The Bidder will maintain all data and reporting related to Modification hours and usage, and this information must be made available to the State upon request.	All Bidders

2.4.6. Maintenance Management

Maintenance Management encompasses the administration processes, resources, and technologies necessary to keep the essential/critical business and technical functions of the

solution operational and poised for changes to meet future needs. The Vermont Medicaid Enterprise systems play a pivotal and indispensable role for a wide variety of enterprise Stakeholders, and thereby, must be continuously available and performing at the utmost level of efficiency to effectively meet their needs.

SoV is seeking a Maintenance Management solution, as detailed by ([DEL – 20, RFP Section 2.5.20](#)) the System Maintenance Support Plan (SysMSP) that evolves the spectrum of maintenance and advancement to respond and address the changing landscape of the State needs across the spectrum of the Contract. The Bidder will provide the necessary support and resources to perform all required maintenance, while utilizing advanced technologies and design principles, to move individual module solution and overall Vermont Medicaid Enterprise maturity forward. This evolution must be built upon a foundation that is designed, managed, and supported to allow nimble change and fully support the State’s current and future business needs.

Table 11: Maintenance Management Requirements

REQ ID	Maintenance Management Requirements	Scope
GR-125	The Bidder will provide a dedicated team to verify and monitor the successful implementation of all system and operational changes, maintenance, and/or modifications in accordance with (DEL – 20, RFP Section 2.5.20) a System Maintenance Support Plan (SysMSP); which shall include system processing, accuracy, and timely corrections of any problems as related to the original system change.	All Bidders
GR-126	The Bidder will provide Maintenance Support activities during Operations. This includes making changes to existing functionality and features that are necessary to continue proper system and/or operational services; routine maintenance; data corrections; running reports; communications to State-authorized Stakeholders; root cause analysis; applying change requirements; software, hardware, or network upgrades; configuration changes; State rule changes; infrastructure policy impacts; and corrective or adaptive maintenance.	All Bidders
GR-127	The Bidder will provide Modification Support Analysis, as part of maintenance, during Operations. This includes the functional and non-functional requirements for adding new functionality and operational services, features, or capability to the proposed system(s) on prioritized requests from the user community and other critical business needs from a technical and logistical standpoint.	All Bidders
GR-128	The Bidder will provide production support activities during Operations. This includes supporting production systems and operations, addressing system interruptions, identifying, and alerting Stakeholders of potential issues, focusing on identifying and fixing system faults quickly or crafting workarounds and enabling problem management root cause analysis and problem remediation.	All Bidders
GR-129	The Bidder will provide user support activities during Operations as negotiated, and agreed upon, between the Bidder and the State. This includes conducting system research and responding to inquiries.	All Bidders
GR-130	The Bidder will provide audit activities during Operations. This includes regular audits of both automated and manual business and technical processes for correctness and reporting of results to the State.	All Bidders
GR-131	The Bidder will perform and complete all work necessary to correct and resolve the operational system and/or non-system-based problem, defect, or deficiency. If the work cannot be completed within the allotted time, The Bidder will present the State with a Corrective Action Plan (CAP), to be approved at the discretion of the State that summarizes the extent of the problem, defect or deficiency while laying out a framework and timeline for resolving the defect/problem	All Bidders

REQ ID	Maintenance Management Requirements	Scope
GR-132	The Bidder will utilize Microsoft Azure DevOps, the State-approved online Defect Management tool for the identification, impact assessment, definition, traceability, verification, and reporting of all defects and resolutions. This includes the workaround resolutions as approved by the State using the Change Control Process throughout the Contract.	All Bidders
GR-133	The Bidder will conduct development walkthroughs as appropriate to demonstrate to the State that all functions have been completely and accurately planned, developed and unit tested as well as record problems using the State-approved online Defect Management tool.	All Bidders
GR-134	The Bidder will use results of testing activities, previous project lessons learned, and industry trends and best practices to reduce the occurrence of defects in future projects (continuous improvement).	All Bidders
GR-135	The Bidder will document all lessons learned as part of the closeout effort for each project or initiative and review the results with the State.	All Bidders
GR-136	The Bidder will maintain a comprehensive lesson learned repository that is a knowledge base of all lessons learned and documented for each project or initiative. This repository will be updated with all new lessons learned within thirty (30) business days after a project or initiative is completed.	All Bidders
GR-137	The Bidder will implement a State-approved process for reviewing and incorporating all lessons learned into future projects or initiatives on a defined schedule.	All Bidders
GR-138	The Bidder will maintain a State-approved defect resolution process that determines resolution timelines based on a mutually agreed-upon and assigned severity level.	All Bidders
GR-139	The Bidder will have the ability to selectively move modifications on a release schedule with State approval, with the flexibility to selectively back out system changes prior to a release (last minute) without significant resources or impact (point in time restore).	All Bidders
GR-140	The Bidder will implement improvements, changes, or enhancements to an efficient, scheduled, and State-approved approach that will enable all other environments to update and mirror the “new” production functionality.	All Bidders
GR-141	Bidder will identify impacts to existing reports and queries as data sources change and evolve.	All Bidders
GR-142	The Bidder will update existing reports and queries impacted by re-occurring/ongoing data set changes/updates (e.g., annual code set updates).	DAR
GR-143	The Bidder will detect, log, notify, and respond appropriately to errors and exceptions in both system and data processing.	All Bidders
GR-144	The Bidder will collaborate with the source system Bidder to resolve bad or otherwise corrupt data in accordance with the data quality review process timelines.	All Bidders
GR-145	The Bidder will maintain a data quality review process for the identification and resolution of corrupt or bad data.	All Bidders
GR-146	The Bidder will collaborate with the State to provide (DEL – 19, RFP Section 2.5.19) a Release Management Plan (ReIMP) for State approval that, aligns with the State Release Management Plan template included in the Procurement Library.	All Bidders
GR-147	The Bidder will provide, as part of the ReIMP, a Network Design and Monitoring Plan for an optimally performing computing and data transporting environment and it will be continuously updated as Module Bidder’s solutions are networked to reflect a new integrated diagram.	All Bidders

REQ ID	Maintenance Management Requirements	Scope
GR-148	The Bidder will implement a configuration management process (integrated when additional Module Bidder contracts are executed) with proven promotion and version control procedures for the implementation of a multi-Bidder, integrated system wide enterprise, which may include: a) System modules b) Commercial Off the Shelf (COTS) products c) System software and operating Systems (OS) d) Network e) Service and Service Registry f) Files (including documents) g) Databases h) Hardware i) Interfaces with other systems	All Bidders
GR-149	The Bidder shall allow a State representative to participate in any Bidder facilitated/run user group that is associated with any part of the awarded and/or implemented MDWAS.	All Bidders
GR-150	The Bidder will maintain, as part of the RelMP, change management metadata regarding all system application release and operational performance and behavior. Where possible, this will be integrated with overall infrastructure change management metadata to provide a complete integrated view of system and environment changes.	All Bidders
GR-151	The Bidder will provide a quarterly Configuration Management Summary report providing a high-level overview of any changes to the system baseline configuration and operational usage.	All Bidders
GR-152	The Bidder will allow for the implementation of, in collaboration with other module Bidders, specific tools and infrastructures (as approved by the State) for software configuration management.	All Bidders
GR-153	The Bidder will document and maintain State approved standard maintenance windows, that are coordinated across solutions, for system maintenance and downtime to minimize MES Stakeholder disruption.	All Bidders
GR-154	The Bidder will notify and coordinate with the State and affected solutions for approval of scheduled and emergency maintenance windows and system outages.	All Bidders
GR-155	The Bidder will document all incidents in accordance with the State standard Incident Reporting Form (IRF) template (DEL-3, Section 2.5.3).	All Bidders

2.4.7. Testing Management

Testing focuses on the use and application of testing methodologies/use cases to assess how changes to business and technical processes are made throughout the project phases, in accordance with the approved System Development Life Cycle (SDLC) and System Testing Plan (STP), ([DEL – 13; RFP Section 2.5.13](#)). These requirements and the solution encompassing them help to ensure that all functionality meets SoV’s defined goals and requirements.

The key to testing all Vermont Medicaid Enterprise solutions is rooted in a well-planned and executed testing plan that governs the life cycle of testing activities throughout all SDLC phases. The State expects all testing methodologies to focus on quality testing approaches with documented results. Therefore, the overall testing solution must account for planning and scripting testing scenarios that will be performed by non-Bidder staff, such as DVHA, during User Acceptance Testing (UAT), and for deploying those testing scenarios across the MDWAS components and their connections/interfaces with source data systems. Because, as the modularization of the Vermont Medicaid Enterprise continues, dependencies across modules will increase, making cross module testing ever more critical for assurance that all changes are implemented correctly without unintended breaks or defects. Overall, the State expects a testing methodology which focuses on reducing defects and rework in implementing changes.

Table 12: Testing Requirements

REQ ID	Testing Requirements	Scope
GR-156	The Bidder will collaborate with the State to provide (DEL – 13, RFP Section 2.5.13) a System Testing Plan (STP) for all project phases that, at a minimum, complies with ISO/IEC/IEEE 29119-3:2 3 and sufficiently addresses the challenges presented by a multi-system, integrated solution.	All Bidders
GR-157	The Bidder will provide in the STP a complete narrative and detailed plan of the test strategy.	All Bidders
GR-158	The Bidder will provide in the STP the testing methodology that accommodates comprehensive coverage of different types of testing (e.g., component, system, regression, integration, parallel, load, UAT).	All Bidders
GR-159	The Bidder will include in the STP weekly system test reporting activities, test result reporting, user acceptance testing support, readiness testing, and performance testing activities.	All Bidders
GR-160	The Bidder will provide in the STP, from an architecture perspective, a test suite for the application of services in a Service Oriented Architecture (SOA) and the testing of the ways the service is used by business applications.	All Bidders
GR-161	The Bidder will provide in the STP, test scenarios for every type of processing cycle, including daily, weekly, bi-weekly, monthly, quarterly, annually, year-end, financials, and specified/ad hoc requests, where applicable.	All Bidders
GR-162	The Bidder will plan parallel tests of current systems and operations, based on tests of actual data, that can be compared to the replacement systems and operations.	DAR
GR-163	The Bidder will provide in the STP, optimal test scenarios of the computing environments for performance tuning to establish baseline sizing and define benchmarks to size for future growth requirements, including capacity planning and utilization activities.	All Bidders
GR-164	The Bidder will design and identify in the STP, opportunities to reduce organizational risk, facilitate better MES Stakeholder resource forecasts, improve testing activities and schedules, and lower the incidence of reactive break/fix episodes.	All Bidders
GR-165	The Bidder will identify in the STP, the order by which the selected testing functions and activities are to be performed during the project life cycle and combine testing functions that maximize testing efficiencies.	All Bidders
GR-166	The Bidder will include in the STP, data refresh capabilities for every testing environment(s) that facilitates clean and adequate testing cycles, online and batch, for all test categories and allows for a standard refresh schedule, State-approved exceptions, and ad hoc requests.	All Bidders
GR-167	The Bidder will include in the STP, test environment rollbacks (for new releases, versions, upgrades, and critical fixes) in the UAT and final acceptance test environments.	All Bidders
GR-168	The Bidder will document in the STP, all requirements testing assumptions, issues, and action items, including strategies to manage execution and quality risks.	All Bidders
GR-169	The Bidder will include in the STP, converted data validation tasks and activities prior to testing.	All Bidders
GR-170	The Bidder will include in the STP, an approach to run parallel tests of current systems and operations, based on tests of actual data, that can be compared to the replacement systems and operations.	DAR
GR-171	The Bidder will cooperate with other project vendors to document a System Test suite (STP) for testing and evaluating the results of the	All Bidders

REQ ID	Testing Requirements	Scope
	current and new project components integration and interoperability deployed in the MES solution constructed by additional MES Bidders.	
GR-172	The Bidder will cooperate to develop, maintain, and submit within twenty (20) business days of approved milestone, all SDLC documentation, including all requirements, test suite, technical specifications, and test results as updated or following each approved project milestone, both the overall MDWAS project and individual maintenance and modification projects, for State approval.	All Bidders
GR-173	The Bidder will develop, for State approval, individual test suites for each system change that includes the test approach and tools. This test suite will be used to complete testing and provide the documented test results to the State.	All Bidders
GR-174	The Bidder will provide the system change test suite to the State for review and approval prior to placing a component in a computing environment beyond development/unit test.	All Bidders
GR-175	The Bidder will provide a dedicated team to assist, complete, and submit results, in a State-approved format, of all comprehensive system(s) tests as documented in the State-approved System Testing Plan (e.g., Unit test, system test, UAT) for all work.	All Bidders
GR-176	The Bidder will cooperate to make the development and test system environment available to the development team, production support and help desk, trainers and trainees, and any other approved users for these environments as defined by the State. The Bidder will ensure the development and test system environments are available 95% of the time Monday through Friday, 7 a.m. ET to 5 p.m. ET. Scheduled maintenance will be performed and completed outside of the before mentioned day/time range.	All Bidders
GR-177	The Bidder will provide secure access as applicable and appropriate to the development and test environments to a subset of Authorized Users. Authorization will be by implementation track within each environment. Some of the users will be State-authorized Bidders supporting development and/or testing activities.	All Bidders
GR-178	The Bidder will provide State Development Staff remote access to the development/test environments that conforms to the security protocols used by the State.	All Bidders
GR-179	The Bidder will ensure development/test environments have sufficient security to prevent unauthorized physical, system, and remote access.	All Bidders
GR-180	The Bidder will ensure development/test environments enable access to appropriate devices and resources required to connect to the State environment.	All Bidders
GR-181	The Bidder will ensure the various test environments, based on State standards and approval, will mask critical and sensitive data fields where required for distribution, especially data classified as Protected Health Information (PHI) and Personally Identifiable Information (PII) data, and adhere to the same level of security compliance for such data as is required for a production environment.	All Bidders
GR-182	The Bidder will cooperate to identify and provide to the State-identified Bidders, the applicable Deliverables for each milestone that meet the requirements of system development, testing, and implementation subject to State approval.	All Bidders
GR-183	The Bidder will provide sufficient time, resources, and durations for all phases of testing, including testing done by entities other than the Bidder.	All Bidders
GR-184	The Bidder will work with all MES Bidders to establish test frameworks to accommodate comprehensive coverage of all test objectives and will support all Bidders and partners collaborating on the solution.	All Bidders

REQ ID	Testing Requirements	Scope
GR-185	The Bidder will ensure that it provides adequate staffing support the State testing team throughout any/all testing efforts deployed across the life cycle of the Contract.	All Bidders

2.4.8. Infrastructure

Infrastructure refers to the administration and collection of hardware, software, middleware, networks, data centers, cloud hosting, facilities, and related equipment used to develop, test, operate, monitor, manage, and/or support the MDWAS systems and their connection to the MES. Infrastructure includes the basic, underlying framework of all business and technical functionality and the process for maintaining this framework.

SoV expects Bidders to provide the full life cycle of Infrastructure support in a solution that includes the hosting, management, and maintenance of all infrastructure components to ensure that all functionality is available to MES Stakeholders with minimal downtime. This includes ensuring performance and uptime requirements are continuously met and evaluating all infrastructure components for optimizations or updates. Bidders are not restricted to any single managed infrastructure solution and are encouraged to propose the solution(s) that meets the requirements of this RFP and provides the best value to the State.

Table 13: Infrastructure Requirements

REQ ID	Infrastructure Requirements	Scope
GR-186	The Bidder will be required to implement, host (or arrange for third-party hosting), operate, maintain, and manage all infrastructure, including all hardware, software, middleware, and licenses necessary for successful operation of all systems and services under the scope of work of the Contract.	All Bidders
GR-187	The Bidder will be solely responsible for the end-to-end oversight and management of all environments, including ensuring performance metrics and SLAs are met.	All Bidders
GR-188	The Bidder must meet the applicable State and Federal privacy and security standards in the hosting and support of all infrastructure, including the Federal Centers for Medicare and Medicaid Services (CMS) and Social Security Administration (SSA) cloud computing standards for data maintained within the system.	All Bidders
GR-189	The Bidder will retain the responsibility and costs for providing network connectivity and access to all systems and data under their scope to all State-authorized Stakeholders. The Bidder will provide the tools and infrastructure to support required access.	All Bidders
GR-190	The Bidder will retain all responsibility and costs for all software, hardware, and infrastructure Maintenance and Operations necessary to fulfill their obligations of this RFP.	All Bidders
GR-191	The Bidder will notify the State of all software and infrastructure version upgrades and/or end of support dates when received from a software/infrastructure contractor. The Bidder will also develop and execute a State-approved plan and schedule for upgrade/replacement. All costs for upgrades and/or end of life or support date changes will be covered by the Bidder. Software or infrastructure upgrades or replacement activities will be categorized as the following: <ul style="list-style-type: none"> a) Major: Complete version upgrade with functionality change or complete replacement with a new product b) Minor: Incremental update to existing products c) Emergency Upgrade: Upgrade to a solution and/or its infrastructure that is necessary to address: 	All Bidders

REQ ID	Infrastructure Requirements	Scope
	(1) a current or imminent disruption of the business's ability to protect assets, meet organizational needs, and/or satisfy regulations due to solution failure; or (2) a current or imminent security threat.	
GR-192	The Bidder will notify the State and present the upgrade/replacement plan within 20 business days of awareness of a software or infrastructure upgrade notice received from a software/infrastructure contractor unless the change is categorized as an Emergency Upgrade, in which case for which notification must be given five days prior to the upgrade date or as soon as the notification of the upgrade is received from the software/infrastructure contractor.	All Bidders
GR-193	The Bidder will implement the approved upgrade/replacement plan for all software and infrastructure upgrades in accordance with the State approved schedule.	All Bidders
GR-194	The Bidder will ensure all software is supported at a minimum level as defined by Vermont's Agency of Digital Services (ADS)/State and Federal standards.	All Bidders
GR-195	The Bidder will collaborate with the State to provide an Asset Management Plan that describes the process the Bidder will use to manage applicable technology assets for the duration of the Contract within a multi-Bidder, integrated system wide enterprise solution. This plan will include, at a minimum, an inventory of the following: a) Hardware/software inventory (including location) b) Procurement information c) Contract information d) License management	All Bidders
GR-196	The Bidder will provide the base infrastructure and optimization of all systems under the scope of this RFP to meet required application specific uptime/response time requirements related to performance requirements, deliverable due dates, and Service Level Agreements (SLAs) contained within this RFP and subsequent Contract award.	All Bidders
GR-197	The Bidder will provide reporting of all infrastructure optimizations annually, or after any major system change, to meet or exceed performance requirements or as requested by the State.	All Bidders
GR-198	The Bidder will ensure all systems are available 24/7, 365 days a year, 99% of the time, measured and reported weekly (Sunday through Saturday), except for scheduled downtime, natural disaster and other force majeure, or as agreed to in the Contract.	All Bidders
GR-199	The Bidder will document and maintain State approved applications specific response time requirements, measurements, and reporting.	All Bidders
GR-200	The Bidder will ensure average application specific system response times are within application approved response time requirements, 95% of time, measured and reported weekly (Sunday through Saturday), excluding scheduled downtime, natural disaster and other force majeure, or as agreed to in the Contract.	All Bidders
GR-201	The Bidder will monitor, track, and report to the State infrastructure space and storage trends over the term of the Contract, including space and storage for databases, data stores, universes, and data marts.	All Bidders
GR-202	The Bidder will collaborate with the State to provide a detailed approach to capacity and performance monitoring as part of the overall (DEL – 22, RFP Section 2.5.22) Performance Management Plan (PerfMP) that, at a minimum, outlines the strategy for assessing the overall integrated solution and component performance, and sufficiently addresses the challenges represented within a multi-Bidder, integrated systems solution. The PerfMP will describe the solution's performance requirements, the elements of the solution developed to measure performance, and the	All Bidders

REQ ID	Infrastructure Requirements	Scope
	solution performance measurements to ensure that requirements are continuously met.	
GR-203	<i>(intentionally blank)</i>	
GR-204	The Bidder's proposed solution will include exception handling mechanisms to facilitate error correction and/or auditing across multiple components of the MDWAS without impacting concurrent, overall operations, as well as reporting of exceptions to the State.	All Bidders

2.4.9. System Compliance and Security

System Compliance and Security establishes the benchmarks upon which any Modules and their connection to the Vermont Medicaid Enterprise solution must meet. These benchmarks ensure that State and Federal standards for compliance and security are met to protect the integrity of all business and technical components. Solutions that do not meet these compliance and security standards put SoV at risk. Basic compliance begins with the implementation and operations of a Federally certified solution, but it also continues with requiring recurrent maintenance and review activities to ensure consistent compliance. The Bidder is expected to maintain compliant systems, information security plans/policies ([DEL – 5](#); [RFP Section 2.5.5](#)) such as a System Security Plan (SSP) and abide by all required policies and procedures noted under the auspices of this RFP.

In addition to compliance, SoV requires strict security protocols on all solutions. This business area defines the policies and requirements for all security system capabilities that the Modules and their connection to the MES must constantly meet. Overall, the Bidder must ensure that System Compliance and Security requirements are met, maintained, and are fully supported through all phases of the project.

Table 14: System Compliance and Security Requirements

REQ ID	System Compliance and Security Requirements	Scope
GR-205	The Bidder will collaborate with the State to provide (DEL – 6 ; RFP Section 2.5.6) a Risk Management Plan (RMP), for all phases of the overall MDWAS implementation and operations project, that at a minimum, complies with industry project management standards, includes a Comprehensive Risk Assessment and Risk Mitigation Plan, and sufficiently addresses the challenges represented within a multi-Bidder, integrated systems solution.	All Bidders
GR-206	The Bidder will ensure the system(s) is compliant upon Operational GoLive and remains compliant with applicable State and Federal regulations and standards contained in National Institute of Standards and Technology (NIST) Publication 800-53 current revision and MARS-E 2-0, proven through independent third-party production security controls assessment. This assessment will be conducted, at a minimum annually, at no cost to the State and by a State approved third party that maintains no financial or controlling relationship with The Bidder. The Bidder will be responsible for modifications to remain compliant, including compensating controls to mitigate gaps. Additionally, the Vendor will provide documented assessment results and produce corrective action plans for any deficiencies identified as well as be responsible for modifications to remain compliant based on the terms and conditions of the Contract.	All Bidders
GR-207	The Bidder will review and update the risk assessment, at a minimum on an annual basis, in coordination with AHS and the State of VT Chief Information Security Officer.	All Bidders

REQ ID	System Compliance and Security Requirements	Scope
GR-208	<p>The Bidder will collaborate with the State to provide (DEL – 5, RFP Section 2.5.5) a System Security Plan (SSP) that, at a minimum, documents the State's plan to comply with State and Federal Security and Privacy rules, and sufficiently addresses the challenges represented within a multi-Bidder, integrated systems solution. The State will approve the SSP and all associated artifacts and will conduct audits/evaluations of the Plan established by The Bidder at least annually.</p>	All Bidders
GR-209	<p>The Bidder will ensure the SSP enables the following processes and/or data collection activities to occur:</p> <ol style="list-style-type: none"> a) Development and submission of a Statement on Standards for Attestation Engagements (SSAE) 18, Service Organization Control (SOC) 2 Type II Compliance Report b) Development and maintenance of organizational information security policies c) Privacy Impact Analysis that identifies the data elements of the system that expose Vermont beneficiaries to potential privacy threats and the system controls in place to mitigate private data disclosure risks d) A security event notification process, event evaluation and escalation procedures, and security event response procedures e) A complete network diagram showing servers, printers, workstations, firewalls, intrusion prevention systems, network security device internet connections, and any other network connected device f) A complete list of the firewall rules for any applicable firewalls g) A detailed plan for system log collection and monitoring h) An antivirus deployment/maintenance plan i) A software maintenance plan, including operation systems and third-party software updates j) An agreement that criminal background checks will be completed and passed by all employees prior to being allowed access to State data k) Procedures to limit access to information to those individuals who need such information for the performance of their job functions and ensuring that those individuals have access to only the information that is the minimum necessary for the performance of their job functions l) A description of how physical safety of data under its control will be protected using appropriate devices and methods, including alarm systems, locked files, guards, or other devices expected to prevent loss or unauthorized access to data m) A description of the steps taken to prevent unauthorized use of passwords, access logs, badges, or other methods designed to prevent loss of, or unauthorized access to, electronically or mechanically held data n) An agreement to comply with Health Insurance Portability and Accountability Act, (HIPAA) Privacy Rules (Federal regulations) as a Business Associate of the State. 	All Bidders

REQ ID	System Compliance and Security Requirements	Scope
GR-210	<p>The Bidder will ensure that the SSP complies with State and Federal laws, rules, regulations, standards, and guidelines to include the following:</p> <ul style="list-style-type: none"> a) NIST Publication 800-53 current revision b) MARS-E-2-0 c) Federal Information Processing Standard (FIPS) 200 d) The American Recovery and Reinvestment Act (ARRA) e) Patient Protection and Affordable Care Act (PPACA) f) Title XIX of the Social Security Act g) Title II, Subtitle F, Sections 261 through 264 of the HIPAA, Pub. L. 104 191 h) Medicaid IT Supplement 11 01 v1.0, Enhanced Funding Requirements: CMS Conditions and Standards (C&S) focus areas. i) CFR 42 Part 2 Substance Abuse (GR-214) 	All Bidders
GR-211	<p>The Bidder will ensure the system(s) maintains compliance with current and future security, privacy, accessibility, and certification laws (State and Federal), regulations, policies, and guidelines relevant to system security, confidentiality, integrity, availability, and safeguarding of information, where any of these overlap, The Bidder will ensure that the system(s) will always strive to attain the more stringent policy. Bidder retains responsibility for all modifications to the system(s) to maintain compliance according to the terms and conditions of the resulting Contract.</p>	All Bidders
GR-212	<p>The Bidder will comply with Attachment D and notify the State within 24 hours of discovery of a non-compliance incident as defined in the SOV Incident Report Template found in the procurement library.</p>	All Bidders
GR-213	<p>The Bidder will ensure the confidentiality, integrity, and availability of Electronic Protected Health Information (ePHI). Further, The Bidder will ensure the system supports integrity controls to guarantee that transmitted ePHI is not improperly modified without detection. Any successful or unsuccessful attempts of modification of ePHI must be reported to the State as part of a monthly summary report.</p>	All Bidders
GR-214	<p>The Bidder will notify the State within 30 minutes of confirmation of discovery of all successful unauthorized attempts at modification of ePHI. Upon discovery the Bidder must validate the discovery within 14 business days.</p>	All Bidders
GR-215	<p>The Bidder will implement policies and procedures for guarding, monitoring, and detecting malicious software (e.g., viruses, worms, malicious code), implement controls based on trends, and report all discoveries to the State monthly.</p>	All Bidders
GR-216	<p>The Bidder will notify the State within 30 minutes of discovery of a successful malicious software attempt.</p>	All Bidders
GR-217	<p>The Bidder will notify the State within 30 minutes of discovery of confirmed abnormal data behavior. The Bidder and the State will mutually define abnormal data behavior.</p>	All Bidders
GR-218	<p>The Bidder will propose, for State approval, and implement system controls to ensure system security during software program changes and promotion in any environment that contains regulatory data. The Bidder will report any successful security breaches during the software change or promotion.</p>	All Bidders
GR-219	<p>The Bidder will ensure that all applications are protected against unauthorized access per State and Federal guidelines. Additionally, all transmission lines and communications services and linkages between the data and each information system will always be secure from unauthorized access between each system, and the network. All attempts of unauthorized access will be reported to the State in a monthly summary report.</p>	All Bidders

REQ ID	System Compliance and Security Requirements	Scope
GR-220	The Bidder will notify the State within 30 minutes of confirmation of discovery of all confirmed successful unauthorized access requests. The Bidder must validate the discovery within 14 business days.	All Bidders
GR-221	The Bidder will monitor and provide State-approved metrics and reporting on system security, privacy, confidentiality, accessibility, and integrity on a monthly basis.	All Bidders
GR-222	The Bidder will notify the State within 30 minutes of confirmation of discovery of all successful breaches of system security. The Bidder must validate the discovery within 14 business days.	All Bidders
GR-223	The Bidder will maintain a Security Breach Response Team available 24 hours a day, 7 days a week and within five minutes of notification of an incident to respond to security violations and breaches (physical and electronic). This includes communications to a defined list of personnel at the State tied to the State's Continuity of Operations/Disaster Recovery (COOP/DR). State staff will be informed of response plan, including specific steps and timeframes for resolution.	All Bidders
GR-224	The Bidder will initiate communications with State staff during a security incident that will be hourly and progressive.	All Bidders
GR-225	The Bidder will collaborate with the State to define a comprehensive process for managing the Access Reporting component of the SSP that applies to granting, monitoring, tracking, and storage of all user access. This plan must be maintained on an annual basis.	All Bidders
GR-226	The Bidder will provide a State-approved, user centered designed and intuitive interface for Security Administrators to grant, track, manage, and revoke access for individuals. Any User Interface must be Section 508 compliant. System will also provide auditing capabilities for approved audit resources.	All Bidders
GR-227	The Bidder will conduct a review of all access rights and update access rights quarterly or upon request of the State. Bidder will produce a report listing all review activities and actions. All such documentation will be maintained a minimum of seven years per HIPAA.	All Bidders
GR-228	The Bidder will monitor and enforce all access criteria in accordance with State security access and management policies and provide a flexible security management solution capable of maintaining compliance with future State security access and management policies.	All Bidders
GR-229	The Bidder will provide a network infrastructure solution that will be self-contained and in its own security perimeter. In securing the perimeter of The Bidder's network, the use of current and supported International Computer Security Association (ICSA) compliant firewalls is required.	All Bidders
GR-230	The Bidder will ensure all systems undergo Industry Standard security testing (e.g., penetration, physical security, web application, social engineering, and vulnerability tests) minimally on an annual basis, as mutually agreed upon between The Bidder and the State when there has been a significant infrastructure change or resulting from Federal requirements. This security testing will be conducted at no cost to the State and by a State approved third party that maintains no financial or controlling relationship with The Bidder. Additionally, The Bidder will provide documented testing results and produce corrective action plans for any deficiencies identified as well as be responsible for modifications to remain compliant based on the terms and conditions of the Contract.	All Bidders
GR-231	The Bidder will maintain system and access log files for all system(s) and for such time as designated by the State. These log files will contain a complete accounting of all activity for a given system. Bidder will provide State authorized Stakeholder's access to all logs and provide the ability to perform ad hoc reporting.	All Bidders

REQ ID	System Compliance and Security Requirements	Scope
GR-232	The Bidder will design and execute security testing to prevent unauthorized access to the system (intrusion detection and vulnerability testing) on a quarterly basis and provide a report of all findings to the State within 10 business days. Any issues identified and reported to the State are to be resolved according to the following schedule: a) High issues to be resolved in 90 calendar days b) Medium issues to be resolved in 120 calendar days c) Low issues to be resolved in 180 calendar days.	All Bidders
GR-233	The Bidder will ensure that all Subcontractors that have access to protected health information/confidential data sign and comply with a Business Associate Agreement (BAA), which contains all requirements, mandated by the BAA on file between The Bidder and the State, and comply with HIPAA regulations for such agreements. Further, The Bidder will ensure that all individuals having access to the confidential data will agree in writing to abide by State and Federal rules and policies related to confidentiality at the time of hire and annually.	All Bidders
GR-234	The Bidder will ensure all data is restricted to the continental United States (CONUS).	All Bidders
GR-235	The Bidder will ensure all levels of security, within the enterprise system(s) applications and the MDWAS, are in alignment with State policy, guidance, and procedures.	All Bidders
GR-236	The Bidder will provide a National Institute of Standards and Technology (NIST) based data classification schema with data items flagged to link them to a classification category and has an access privilege scheme for each user that limits the user's access to one or more data classification categories.	All Bidders
GR-237	The Bidder will establish, enforce, document, communicate, and seek State approval of responsibilities, processes, and procedures for all usage types, in accordance with State and Federal standards and laws.	All Bidders
GR-238	The Bidder will ensure system capabilities include NIST role-based access control (e.g., add, update, read, delete) and how roles should be available in the system. Bidder will provide tools for identified State staff to define various roles.	All Bidders
GR-239	The Bidder will implement online security checks, including security by individual, location, files, and fields, before allowing access to any State files, including data, software, resources, code, or any other files resident with or accessed by the State.	All Bidders
GR-240	The Bidder will ensure the system independently stores and tracks all security, privacy, or access request and approval documentation, as required by the most stringent relevant Federal regulation (CMS, IRS, SSA, NIST).	All Bidders
GR-241	The Bidder will propose a solution that ensures complete segregation of State data from other Bidder customers to prevent the access of State data from unauthorized parties. All access requests will be approved by designated State staff. The proposed solution will comply with all court ordered or warranted requests for data access.	All Bidders
GR-242	The Bidder will provide Internet security functionality to include the use of firewalls, intrusion detection/intrusion prevention (IDS/IPS), https, encrypted network/secure socket layer (SSL), and security provisioning protocols such as secure sockets layer, and Internet protocol security (IPSEC), as well as provide data loss prevention tools (DLP) and use supported certificates.	All Bidders

REQ ID	System Compliance and Security Requirements	Scope
GR-243	The Bidder will implement and maintain a secure environment for both online and batch access to State data using a fully functional and documented security software package for all environments. This secure environment will include web application testing protocols, the use of code review software and secure file transfer meeting FIPS 140-2 standards, or FIPS 140 standards as adopted by NIST, and enabling all reporting of testing and review activities available to the State.	All Bidders
GR-244	The Bidder will encrypt data at rest, at transfer, and backed-up data per FIPS 140-2 Standards.	All Bidders
GR-245	The Bidder will ensure that the system(s) provides three types of controls to maintain data integrity: a) Preventive Controls: Controls designed to prevent errors and unauthorized events from occurring b) Detective Controls: Controls designed to identify errors and unauthorized transactions which have occurred in the system c) Corrective Controls: Controls to ensure that the problems identified by the detective controls are corrected. These controls will be in place at all appropriate points of processing to comply with HIPAA standards. Should the proposed solution not meet these standards, compensating controls, approved by the State, will be implemented.	All Bidders
GR-246	The Bidder will ensure the system contains a data definition for the Designated Record Set (DRS) that allows it to be included in responses to inquiries and report requests, as well as: a) Provide the capability to respond to an authorized request to provide a report containing the DRS for a given individual b) Ensure the system provides the capability to identify and note amendments to the DRS for a given individual c) All such documentation will be maintained a minimum of seven years per HIPAA.	All Bidders
GR-247	The Bidder will ensure the system: a) Verifies the identity of all users and denies access to invalid users b) Supports a user security profile that controls user access rights to data categories and system functions c) Maintains a list of users and their security profiles, including updating security files with State-approved additions of new staff and changes to existing security profiles and staff terminations d) Provides two-factor authentication that is scalable and aligns with Federal guidelines, NIST Publication 800-53 current revision and MARS-E-2-0 e) Initially grants users accounts with no access rights and builds each user's security rights profile based on user role and approved security access.	All Bidders
GR-248	The Bidder will designate a full-time Compliance and Security officer to ensure and maintain compliance with HIPAA and NIST standards.	All Bidders

2.4.10. Continuity of Operations

Continuity of Operations business functions ensure that SoV continues to serve and perform essential Vermont Medicaid Enterprise functions under a broad range of detrimental circumstances that may affect any portion of the MES. Business Continuity/Cyber Incident Report/Disaster Recovery (BC/CIR/DR) Plan ([DEL – 4; RFP Section 2.5.4](#)) provides the foundation for all Continuity of Operations activities, as illustrated through the solutions and remedies documented in the processes and procedures, for a multitude of incidents that disrupt any and/or all operation of the MDWAS. Beyond the documented plans, SoV views incident training and staged exercises as vital

to providing comprehensive support for Continuity of Operations, (Cyber) Incident Response, Failover, and Disaster Recovery across the enterprise.

Additionally, SoV believes that outdated plans, and plans that are not actionably viable, present a significant risk to Continuity of Operations. Therefore, SoV expects for the Bidder to continuously review and update this collection of BC/CIR/DR Plan to address potential changes, accuracy, viability, and improvements to adequately address projected MES evolution.

Table 15: Continuity of Operations Requirements

REQ ID	Continuity of Operations Requirements	Scope
GR-249	The Bidder will provide, test, update, maintain, and submit, for State review and approval, a BC/CIR/DR Plan that is aligned to NIST CP-2, NIST-800-53, and MARS-E-2-0 standards and meet all Federal (CMS Standard and the associated Risk Management Handbook Procedures CMSCISO2 4vllstd4.4 or its replacement) and State standards on an annual basis or more frequently as directed by the State, such as after a major system change that materially affects the BC/CIR/DR Plan.	All Bidders
GR-250	The Bidder will perform annual (including pre-go-live) BC/CIR/DR exercises. Exercises will include activities selected from the BC/CIR/DR plan to verify the viability of each singular BC/CIR/DR plan in accordance with NIST CP-4 standards. Exercises will also be performed after major system changes as required by the State. The Bidder will document all testing activities and report to the State instances where appropriately trained personnel were unable to complete the necessary recovery procedures. The State will adjust contingency and training plans to correct the identified plan deficiencies and present updates to the State for approval.	All Bidders
GR-251	The Bidder will provide annual test reports to the State within 10 business days of exercise, BC/CIR/DR Plan reports within one business day of incident, and BC/CIR/DR Plan updates within one business day of identified deficiency.	All Bidders
GR-252	The Bidder will evaluate systems and business processes in collaboration with the State for criticality and necessity to determine appropriate return to operations timeframes during development of both the initial and ongoing BC/CIR/DR plans.	All Bidders
GR-253	The Bidder will ensure the proposed solution allows for a maximum Return to Operations (RTO) of 48 hours for the MDWAS and services after declaration of a disaster.	All Bidders
GR-254	In coordination with the State, the Bidder will provide training to Bidder staff and State identified Stakeholders on the execution of the Business Continuity Plan a minimum of 20 business days prior to implementation of The Bidder's module components, with the implementation of major changes, and annually thereafter or more frequently as directed by the State.	All Bidders
GR-255	The Bidder will review any new applicable Bidder provided business processes, including systems and operations under the scope of Subcontractors, for impact on mission critical functionality and update BC/CIR/DR plans prior to new business process implementation that are essential for Vermont to maintain mission critical functionality and key personnel to be contacted at the time of an event.	All Bidders
GR-256	The Bidder will review all Bidder provided business processes, including systems and operations, under the scope of Subcontractors, for impact on mission critical functionality and update BC/CIR/DR plans annually.	All Bidders
GR-257	The Bidder will update key personnel contact information as it relates to the BC/CIR/DR immediately upon change.	All Bidders

REQ ID	Continuity of Operations Requirements	Scope
GR-258	The Bidder will ensure the BC/CIR/DR Plan: a) provides a framework for reconstructing vital operations to ensure the safety of employees b) provides for the resumption of time sensitive operations and services in the event of an emergency c) provides for initial and ongoing notification procedures d) complies with all NIST 8 61 and MARS-E-2-0 standards.	All Bidders
GR-259	The Bidder will ensure that the BC/CIR/DR Plan operational and system functions, including systems and operations under the scope of Subcontractors, will adhere to HIPAA and NIST standards. These functions may not and cannot be performed and/or stored outside of the continental US (CONUS).	All Bidders
GR-260	The Bidder will provide an up-to-date copy of the BC/CIR/DR Plan in a secure, highly accessible, centralized online location and at an offsite location approved by the State.	All Bidders
GR-261	The Bidder will implement a State approved alert process to handle system related issues, including notifying State identified contacts in accordance with the BC/CIR/DR Plan.	All Bidders
GR-262	The Bidder will provide for back-up capabilities at a geographically separate remote site(s) from The Bidder's primary site(s) in accordance with the standards set forth in the BC/CIR/DR Plan. System and data back-up and recovery points will be mutually agreed upon between the Bidder and the State.	All Bidders
GR-263	The Bidder will provide a back-up and recovery/failover system(s) in compliance with State and Federal rules and regulations to ensure full back-up.	All Bidders
GR-264	The Bidder will support an enterprise-wide, evolving approach to disaster recovery and continuity of operations needs as the Vermont Medicaid Enterprise transforms. The solution will allow for various types of backups (as designated and approved by the State), in accordance with the approved BC/CIR/DR and the criticality and necessity of systems, to eliminate data loss and minimize disruptions to Stakeholders.	All Bidders
GR-265	The Bidder will ensure that personnel who are responsible for systems recovery are trained in accordance with NIST Publication 800-53 and MARS-E-2-0 current revision standards and tested in their ability to execute the contingency procedures to which they are assigned.	All Bidders

2.4.11. Documentation Management

Documentation management consists of the creation, maintenance, storage, and management of documentation and documents for all business and technical components for the MDWAS. In a collaborative, modular, complex environment, complete documentation is necessary for the successful operation of the Vermont Medicaid Enterprise. Centralized, targeted, and relevant documentation (inclusive of [DEL – 17, RFP Section 2.5.17: Operating Procedures Guide](#)) that is highly accessible and readily available ensures MES Stakeholders will have a full understanding of the systems and processes of the Vermont Medicaid Enterprise. SoV expects Bidders to engage in continuous maintenance, review, and quality assurance activities for all documentation to ensure completeness and accuracy. SoV envisions that all documentation must be centrally accessible (on demand) and presented in a manner that allows for ease of use. SoV recognizes that the Bidder's proposed solution may include COTS and/or SaaS products, and that the Bidder and the State will need to mutually define the necessary access and depth of artifacts/materials as related to COTS and SaaS product documentation.

SoV also has specific needs regarding the management of specialized documentation and documents, such as reports and other artifacts, generated from system operation. The State's overall documentation management needs revolve around the necessity to have documentation immediately available (e.g., electronically) to the appropriate MES Stakeholders. The Bidder's

document management solution must also include strategies to reduce probable time lags between document receipt/creation and MES Stakeholder accessibility.

Table 16: Documentation Management Requirements

REQ ID	Documentation Management Requirements	Scope
GR-266	The Bidder will develop and maintain a documentation development, maintenance, and quality review process coordinated with the Project Management Office (PMO) and subject to State approval that ensures regularly scheduled reviews for changes, refinements, updates, and document retirement.	All Bidders
GR-267	The Bidder will adhere to all documentation development, review, approval, and quality assurance timelines specified in the document development, maintenance, and quality review process.	All Bidders
GR-268	The Bidder will consult with State document owners during routine document maintenance and development.	All Bidders
GR-269	The Bidder will prepare, update, revise, and submit to the State for approval all operational, systems, or reporting-based documentation (in all original forms/mediums) as they relate to system changes, maintenance, or modification work requests.	All Bidders
GR-270	The Bidder will provide all new and revised documentation prior to the implementation of changes or modifications.	All Bidders
GR-271	The Bidder will update and publish the metadata repository as updates are implemented.	MDL
GR-272	The Bidder will review all metadata within the metadata repository on a mutually agreed-upon frequency between the Bidder and the State.	All Bidders
GR-273	The Bidder will ensure that documentation adheres to applicable International Organization for Standards (ISO) recommendations, based on State-approved SDLC guidelines, and follows all State publication or documentation styles and standards.	All Bidders
GR-274	The Bidder will provide a documentation format and structure that allows users to easily understand and access related functions.	All Bidders
GR-275	The Bidder will ensure documentation standards apply to all internal, external, paper copy, electronic, and system/operational/technical documentation produced by the Bidder.	All Bidders
GR-276	The Bidder will create and maintain all system and technical documentation for all MDWAS applications, products, and systems. System and technical documentation will utilize State-approved language, diagrams, and structure.	All Bidders
GR-277	The Bidder will utilize the State-approved PMR (DEL – 2; RFP Section 2.5.2) as well as any other State required document repository to maintain system-related business, technical, and operational documentation.	All Bidders
GR-278	The Bidder will ensure all documentation is readily available online and electronically, maintained, retained, archived, and restored as required by all document and data retention laws, including any applicable litigation hold.	All Bidders
GR-279	The Bidder will make available to the State and integrate with the State's enterprise Content Management (ECM)), all MDWAS documentation.	All Bidders
GR-280	The Bidder will ensure all documentation is prepared and accessible using current State standard/approved software packages. All documents will be reviewed and approved by the State prior to publication.	All Bidders
GR-281	The Bidder will provide new, routinely maintained, and updated documentation for all contracted functions in accordance with the State	All Bidders

REQ ID	Documentation Management Requirements	Scope
	approved documentation development, maintenance, and quality review process.	
GR-282	The Bidder will maintain a documentation standard that aligns with the standards and templates set forth by the State and other contracted Bidders and utilize the approved standard throughout the life of the Contract.	All Bidders
GR-283	The Bidder will document and publish all operational, system, and technical processes as they relate to their responsibilities under this Contract as part of ongoing maintenance.	All Bidders
GR-284	The Bidder will maintain a complete and accurate audit trail record of all changes made to documentation. This audit trail will cover the complete life cycle of the documentation from inception to retirement.	All Bidders
GR-285	The Bidder will maintain an electronic tracking, routing, and archiving system for documentation that will record all activities associated with the creation and maintenance for all documentation.	All Bidders
GR-286	The Bidder will ensure appropriate documentation is directly integrated into the operational systems where appropriate, for users. The documentation will be centrally located, accessible through the operational systems, and managed to allow for mass updates to documentation integrated into multiple areas of the operational systems.	All Bidders
GR-287	The Bidder will document all data elements, processes, methodologies, mechanisms, protocols, and other related information for each data source in an interface control document (ICD).	All Bidders
GR-288	The Bidder will ensure a separate ICD will be created and maintained for each data source.	All Bidders
GR-289	The Bidder will develop and maintain documentation for all support, maintenance, and operations related information needed for continued use of all required functionality.	All Bidders
GR-290	The Bidder will document conceptual, logical, and physical models for all database service layers and supporting data stores and make available online to the State stored within all State-approved/required document repositories.	All Bidders
GR-291	The Bidder will maintain and update all conceptual, logical, and physical models to reflect the most current versions after each addition, deletion, or change. Each model shall be versioned, managed, and kept with corresponding system deployment(s).	All Bidders
GR-292	The Bidder will complete all conceptual, logical, and physical models to reflect the most current updates or change based on approval by the State 10 business days prior to implementation of the change. Updates will be published to users at the time of implementation.	All Bidders
GR-293	The Bidder will provide a document, made available online, that describes the contents, format, and structure of all databases and the relationships among all database objects.	All Bidders
GR-294	The Bidder will integrate and provide the capability to electronically route documents to the State required document repositories.	All Bidders
GR-295	The Bidder will maintain State-approved procedures for the storage and destruction of all documents (both electronic and hard copies) in accordance with State of Vermont policy for Electronic Records Management.	All Bidders
GR-296	The Bidder will collaborate with the State and other State identified Bidders and Stakeholders to propose, implement, and maintain standard document management and indexing strategies procedures.	All Bidders

2.4.12. Reporting Administration

The Reporting Administration functions provide an oversight and management framework to support all operational and system reporting. This framework includes parameters encompassing creation, formatting, maintenance, storage, and archiving of all reports generated out of the MDW and DAR solution and their interaction and dependencies to the MES and its MES Stakeholders. Reporting Administration provides the structure for documentation all reports and ongoing review of all generated reports. SoV expects Bidders to align all reporting solutions with the Reporting Administration requirements and standards, including the application of approved styles and standards. The overall goal of the Reporting Administration business area is to ensure the MES Stakeholders have access to accurate, meaningful, readable, and timely reports that MES Stakeholders require to conduct day to day operations. The Reporting Administration requirements do not address the specificities and framework required for SoV State and Federal reporting, those requirements are detailed in [Section 2.8.3 State and Federal Reporting](#).

Table 17: Reporting Administration Requirements

REQ ID	Reporting Administration Requirements	Scope
GR-297	The Bidder will maintain a State approved report generation schedule for all scheduled reports.	DAR
GR-298	The Bidder will generate and provide all automated and ad hoc reports to the State, within the mutually agreed-upon timeframes and within the report generation schedule.	DAR
GR-299	The Bidder will make available all generated reports in the State required reporting/documentation repository.	DAR
GR-300	The Bidder will maintain State approved document and content management procedures and processes.	All Bidders
GR-301	The Bidder will manage all stored reports in accordance with the State-approved document and content management processes and procedures.	All Bidders
GR-302	The Bidder will enable a comprehensive report archival process that is compliant with current State and Federal records retention standards	DAR
GR-303	The Bidder will generate all reports in a format, medium, and time frame acceptable to the State and CMS, without manual intervention or manipulation of data.	DAR
GR-304	The Bidder will generate all necessary reports, as defined by the State, to assist the State in filing all required State and/or Federal daily, weekly, monthly, quarterly, and annual reports. The Bidder and the State will agree upon a due date threshold for each report, as specified annually.	DAR
GR-305	The Bidder will ensure the accuracy of all reports before delivery to the State and correct problems and reprocess reports with identified and substantiated deficiencies within five business days of identification.	DAR
GR-306	The Bidder will develop and maintain State-approved user manuals for the report access and delivery process online.	DAR
GR-307	The Bidder will provide detailed documentation containing methodology/sources used in the development of reports.	DAR
GR-308	The Bidder will provide an initial and ongoing annual analysis of all existing reports and report descriptions, source information, State report owner contact information, query logic, and other metadata for any report utilized. This analysis will be used to create a report of recommendations to support the State for cleanup purposes to reduce duplication and archive queries and reports no longer needed.	DAR
GR-309	The Bidder will deliver a report of recommendations, based upon the annual analysis of reports, to the State within five business days of the end of the contract year.	DAR
GR-310	The Bidder will implement all State-approved recommendations from the report review analysis recommendations report within three months.	DAR

REQ ID	Reporting Administration Requirements	Scope
GR-311	The Bidder will maintain a State approved listing of all reports. The listing must include at least the following information for each report: a) Report name b) Report description c) Users d) Data source e) Frequency f) Format g) Ability to sort and organize report listings by State user-defined configurations h) Query logic i) Meta data j) Hot link to most recent report k) Hot link to the data dictionary	DAR
GR-312	The Bidder will update the report listing within 10 business days of implementation or change to report.	DAR
GR-313	The Bidder will support a variety of media for displaying requested information online, as well as including both hard and soft copies of report results. Output standards will meet Industry Standards for legibility, timeliness, and appropriateness of presentation to the purpose of the information.	DAR
GR-314	The Bidder will create production reports that utilize State approved styles and standards, including headers and footers to provide consistency from report to report.	DAR
GR-315	The Bidder will provide access at the report level, based on role-based security, to individuals based on business need.	DAR

2.4.13. Communications Management

The Communications Management business area outlines the communication standards and requirements expected of Bidders in any sort of communication to MES Stakeholders. The Communications business area applies to both incoming and outgoing communications regardless of communication method. The Communications Management Plan ([ComMP; DEL – 16, RFP Section 2.5.16](#)) must exemplify the State vision and voice while setting the foundation for all communication activities required of the Modules and their interaction and dependencies to the MES. Bidders must ensure that all communications are developed and delivered to the appropriate audience(s) in effective and efficient manner all while in accordance with the approved ComMP.

Table 18: Communications Management Requirements

REQ ID	Communications Management Requirements	Scope
GR-316	The Bidder will collaborate with the State to provide (DEL – 16, RFP Section 2.5.16) a Communication Management Plan (ComMP) for State approval that, at a minimum, conforms to industry project management standards and sufficiently addresses the challenges represented within a multi-Bidder, systems solution. The ComMP will define the information and communication needs of all identified Stakeholders, with specificity and focus on communicating clearly with Stakeholders.	All Bidders
GR-317	The Bidder will submit a unified communications management strategy as part of the ComMP Deliverable for all State communications to internal and external Stakeholders and audiences.	All Bidders
GR-318	The Bidder will notify the State of all legislative, executive level, and media inquiries and forward any such inquires to the State within one business day. The Bidder will not respond to legislative, executive level, or media inquiries unless directed by the State.	All Bidders

REQ ID	Communications Management Requirements	Scope
GR-319	The Bidder will identify and submit all communication materials to the State for review and approval.	All Bidders
GR-320	The Bidder will integrate their electronic communication management tool with or utilize the State required document repository for the review and approval of all communications.	All Bidders
GR-321	The Bidder will begin development of communication materials within three business days of assignment by the State, unless otherwise directed by the State.	All Bidders
GR-322	The Bidder will comply with all State and Federal policies, procedures, and requirements, as well as State approved timelines, for all communications.	All Bidders
GR-323	The Bidder will ensure all communications adhere to State styles and standards. The link to the State's style guide can be found in the procurement library.	All Bidders
GR-324	The Bidder will ensure that the Bidder's own name, logo, or any reference to the Bidder are not included in any public facing communications such as updates, handbooks, forms, other publications, or websites/portals, or on mailing or return envelopes unless specified and prior approved by the State.	All Bidders

2.4.14. Training Management

Training Management provides the overall administration for the initial and ongoing knowledge transfer process of the Bidder's solutions, enabling MES Stakeholders to maximize their usage, familiarity, application, and comprehension of all aspects of the solutions. Training business functions must include training planning ([ComMP; DEL – 18, RFP Section 2.5.18](#)), development, maintenance, and delivery across Bidder staff, SoV staff, providers/partners, and any other SoV identified internal or external MES Stakeholders.

SoV expects a training methodology that provides both standard training schedules/classes coupled with specialized, tailored training approaches that offers the flexibility to customize any aspect or variable of the training framework to address specified needs, such as levels of education, pandemic challenges, special needs, user types, and level of experience. Additionally, the flexible training approach must encompass multiple modes of training presentation styles and methods, such as online, hard copy, and electronic training opportunities in both on demand, pre-recorded, and structured training sessions.

As part of all training activities, SoV expects the Bidder to conduct training assessments and collect metrics and feedback on all training activities. Overall, the State believes that the Bidder's approach to training must be flexible enough to adjust and account for changing user needs to ensure all training provided is relevant, concise, effective, and applicable to SoV needs.

Table 19: Training Management Requirements

REQ ID	Training Management Requirements	Scope
GR-325	The Bidder will collaborate with the State to develop and provide (DEL – 18; RFP Section 2.5.18) a User Training Plan (UTP), for State approval, that details all the activities required to efficiently, accurately and effectively train all State identified and approved personnel in the complete use and operation of the Bidder's solution. Once approved by the State, the Bidder is responsible for implementing and maintaining the Plan, as written, revised and approved, to comply with all system and business operational standards and service levels of the enterprise-wide solution over the life of the Contract. UTP maintenance must occur on a frequency agreed with the State but no less than twice per year.	All Bidders
GR-326	The Bidder will collaborate with the State to provide (DEL – 17, RFP Section 2.5.17) an Operating Procedures Guide (OPG) that includes a	All Bidders

REQ ID	Training Management Requirements	Scope
	highly configurable and agile workflow documentation entry, update, and approval process for the overall operation of the Bidder's solution. This guide, which will be a critical resource for the User Training process as delineated in the User Training Plan, will be updated by the Bidder in a timeframe applicable to the changes incurred, and all updates are subject to State approval.	
GR-327	The Bidder will review the OPG, in its entirety, on an annual basis.	All Bidders
GR-328	<p>The Bidder will include a complete and up to date and searchable OPG as part of the UTP. The Online OPG will be used as part of the basis for user training, unless otherwise specified by the State. Appropriate State staff will approve all additions, changes, and deletions to the Guide. At a minimum, the Online OPG will provide an overall, comprehensive view of the Bidder's solution, including:</p> <ul style="list-style-type: none"> a) Index functionality b) Table of contents c) Glossary d) Screen illustrations, definitions, and their related processes e) System documentation f) Key command instructions g) Screen access instructions h) State-approved/aligned definitions by name, description, values, and related edits/error messages for all data elements for each screen i) Descriptions that indicate applicable edits/error messages and resolutions for each data element j) Consistent field names for the same fields on different screens throughout the system and documentation k) Word search capability l) System security and access capabilities 	All Bidders
GR-329	The Bidder will follow and execute Industry Best Practices, standards, and trends for delivery and focus of training.	All Bidders
GR-330	The Bidder will collaborate with the State to identify annual training needs, update the Training Plan and training materials for identified trainings, and submit an annual update to the UTP for State review, and approval.	All Bidders
GR-331	The Bidder will review and update training materials in an agile, ongoing, iterative process in partnership with State staff and revise as needed to meet the needs of State and program changes.	All Bidders
GR-332	The Bidder will review and update training materials a minimum of 20 business days prior to the program or system changes for review and approval.	All Bidders
GR-333	The Bidder will conduct mock training sessions, a minimum of 15 business days prior to the scheduled training, for the State to provide final review and approval of training materials to ensure the trainings meet State needs and training objectives.	All Bidders
GR-334	The Bidder will conduct annual training needs assessments with users to ensure that the collaborative development and maintenance of the Training Plan addresses the training needs of all Stakeholders and provides recommended training course lists to support each security role.	All Bidders
GR-335	The Bidder will provide all training attendees with assessment tools and evaluations to measure the effectiveness of the training received.	All Bidders
GR-336	The Bidder will generate and maintain training metrics and feedback for all training sessions.	All Bidders
GR-337	The Bidder will develop recommended updates and changes to training based upon the training metrics and feedback collected.	All Bidders

REQ ID	Training Management Requirements	Scope
GR-338	The Bidder will provide all training metrics, feedback, and recommend updates and changes to the State along with a list of attendees, including State Staff (identified by agency, division, and bureau) and other Bidder staff within three business days of each training session.	All Bidders
GR-339	The Bidder will develop trainings for State partners on the MDWAS /program/operational changes that occur over the life of this Contract.	All Bidders
GR-340	The Bidder will develop and execute highly customizable (by program and audience needs) scheduled, ad hoc, and on-demand trainings through individual, small and large group trainings; virtual trainings; and in-person as requested and defined by the State, in accordance with timeframes approved by the State.	All Bidders
GR-341	Upon State request, the Bidder will facilitate off-site trainings, limited to locations within the State of Vermont. The number, locations, and dates of the trainings will be at the discretion of the State, to be mutually agreed upon each Contract year.	All Bidders
GR-342	The Bidder will provide Web-Based Training (WBT) that is accessible to users 24 hours a day 7 days a week and includes a quick reference guide for all training documentation and FAQs.	All Bidders
GR-343	The Bidder will embed training resources directly into operations systems where possible.	All Bidders
GR-344	The Bidder will provide evaluations of enterprise-wide processes to determine additional training needs.	All Bidders
GR-345	The Bidder will perform analysis of user interactions to determine needs for training, education, and outreach to all users as identified by the State.	All Bidders
GR-346	The Bidder will ensure that specified training modules include an electronic proficiency test. Specific course tracking for each trainee will also be included within the applications. For incorrect answers, the proficiency test will allow for multiple test attempts with testing standards for proficiency to be prescribed by the State.	All Bidders
GR-347	The Bidder will provide the means in which training can occur with adequate logins for all users to learn and practice skills from their training courses.	DAR
GR-348	The Bidder will ensure the training environment mirrors and supports production security roles and access for all users.	DAR
GR-349	The Bidder will provide a central repository for all training materials, which will archive training materials, track the history of changes/approvals and allow for the retention of materials in accordance with State defined data retention policies. All customized materials will be the property of State and will be readily accessible and available on demand to State.	All Bidders
GR-350	The Bidder will continue to make training available for a minimum of four weeks after the implementation of a change or as agreed upon with the State.	All Bidders
GR-351	The Bidder will provide hard copies of all training materials as requested and required for the training session.	All Bidders
GR-352	The Bidder will develop training materials in compliance with Americans with Disabilities Act of 1990 (ADA) standards. Any identified changes to training materials to comply with this requirement will be addressed at no cost to the State.	All Bidders
GR-353	The Bidder will cross train its staff to prevent loss of knowledge and expertise when staff leave, as well as to minimize negative impacts to project timelines due to resource availability. Bidder will also develop onboarding and training processes for new staff and turnover in staff.	All Bidders
GR-354	The Bidder will provide a dedicated Training Manager to oversee necessary training staff to meet the identified training needs of the State.	DAR

2.4.15. **Help Desk and Support**

Help Desk and Support provides an overarching resource management structure and plan ([DEL – 21; RFP Section 2.5.21](#)), Help Desk Plan (HDP), to assist and empower MES Stakeholders who need assistance with the Modules and their interaction and dependencies to the MES. Help Desk and Support is the foundation from which the Bidder assists MES Stakeholders with system access and availability issues and in understanding data and report formats, reviewing reporting results, and helping troubleshoot anomalies. Inherent in the Help Desk and Support business area is the structure upon which support is provided to ensure prompt resolution of questions and issues can occur. This structure must include an adequate staffing pattern, that not only addresses appropriate levels of resources, but that the assigned/hired resources have the proper experience, education, and training to efficiently and appropriately handle the level, magnitude, and variety of requests submitted. Routing and prioritization of assistance requests must be both succinct and accurate, so that the resolution can be implemented. Overall, the Bidder must provide a solution that works to resolve all requests in a timely and accurate manner, yielding an overarching positive MES Stakeholder experience.

Table 20: Help Desk and Support Requirements

REQ ID	Help Desk and Support Requirements	Scope
GR-355	The Bidder will collaborate with the State to provide a (DEL – 21; RFP Section 2.5.21) Help Desk Plan (HDP) that, at a minimum, complies with all requirements and performance standards specified in this RFP as well as sufficiently address the challenges represented within a multi-Bidder, integrated systems solution. The State will approve the Plan before a Help Desk is established. Components of the Plan include the following: a) A narrative describing the Help Desk functionality, including defining ownership of roles and responsibilities between the Bidder Help Desk and State-run Help Desk b) The Bidder staffing expectations, both on and off regular business hours, and their roles and responsibilities c) Detailed specifics of all messages used by the Help Desk, both on and off business hours, and in State defined languages d) The routing procedures of all requests e) The security measures employed by the Bidder to protect data privacy f) The data editing procedures employed by the Bidder to protect data integrity g) The procedures for recording and maintaining a statistical database for QC and statistical analysis of all help desk interactions.	All Bidders
GR-356	The Bidder will maintain a State-approved help desk support function that enables user support to be requested through a variety of methods at a minimum on all State business days, 7am-5pm ET.	All Bidders
GR-357	The Bidder will provide a nonautomated response to all requests to the help desk during normal State-approved business hours within 30 minutes, 95% of the time, measured weekly Sunday through Saturday from 7am-5pm EST.	All Bidders
GR-358	The Bidder will provide application-specific support coordinated through the Help Desk Staff that follows all help desk and issue management procedures.	All Bidders
GR-359	The Bidder will provide in person Help Desk support at State facilities on an as requested, temporary basis, at no expense to the State during the term of the Contract. The State will provide the Bidder adequate notification of the in-person support request. The State does not expect that the Bidder will maintain dedicated or separate staff to provide the temporary support.	All Bidders

REQ ID	Help Desk and Support Requirements	Scope
GR-360	The Bidder will provide self-service help and support options within systems and components, including online and contextual help functions.	All Bidders
GR-361	The Bidder will implement and utilize a mutually agreed-upon trouble-ticket system that supports all environments and resolves defects in a timely manner.	All Bidders
GR-362	The Bidder will provide technical assistance as needed to assist users in researching problems, reviewing production outputs, and understanding report formats.	All Bidders
GR-363	The Bidder will collaborate and coordinate with the other Module(s) Bidders to research and resolve issues that are associated with the integration of MDWAS.	All Bidders

2.4.16. Turnover and Closeout

The Turnover and Closeout phase demonstrates the Bidder's readiness to turn over, to SoV or a successor Bidder, the business relationship and operations and fulfill and close out all the requirements of the Contract term or amendment(s). Both the Bidder's and the State's contractual engagement closure objectives benefit from turnover and closeout activities. Contract turnover and closeout is essential for the timely execution of remaining contractual tasks and to conduct a quality closeout process for SoV.

While most Turnover and Closeout activities occur during the end of a Contractual engagement or amendment term, SoV views the ongoing management and maintenance of ([DEL – 23; RFP Section 2.5.23](#)), the Turnover and Closeout Plan (TO&COP) and requirements as essential to ensuring a seamless transition. Therefore, Bidders must propose a logical work plan in this area that occurs throughout all phases of the Overall Module Implementation and Operations Project. By requiring ongoing support of all requirements, the State and the Bidder will put forth a concerted effort to set the stage for the successful fulfillment and completion of the entire Contract/amendment closeout process.

Inherent in Turnover and Closeout, is the expectation of the Bidder to maintain a collaborative and cooperative relationship with SoV, as well as, any newly engaged Bidders, while performing the turnover and closeout services defined in this RFP. The Bidder will, upon SoV request and/or beginning with the selection of a successor Bidder, provide continuous and comprehensive Turnover and Closeout support as indicated in the requirements under the auspices of this RFP.

Table 21: Turnover and Closeout Requirements

REQ ID	Turnover and Closeout Requirements	Scope
GR-364	The Bidder will collaborate with the State to provide (DEL – 23; RFP Section 2.5.23) a Turnover and Closeout Plan (TO&COP) to the State for approval, and update the TO&COP, at a minimum, on an annual basis.	All Bidders
GR-365	The Bidder's TO&COP will detail the overall approach and high-level tasks required to successfully transition operations of the Bidder's solution to another entity at the end of the Contract period or as the result of an amendment. At a minimum, the TO&COP will include the following sections: a) Introduction and purpose b) Approach to staffing including a staffing matrix for transition c) Detailed turnover Project Plan d) Systems and Operations Training plan e) Procurement Library.	All Bidders
GR-366	The Bidder will implement the State-approved TO&COP within 10 months of Contract/Amendment end date or as requested by the State.	All Bidders

REQ ID	Turnover and Closeout Requirements	Scope
GR-367	The Bidder will provide the State with a Turnover Results Report, which will document completion, and results of each step of the Turnover Plan no later than four months following State approval of the turnover of operations.	All Bidders
GR-368	The Bidder will provide updates as indicated in the TO&COP as requested (no later than) four months prior to the end of the Contract, Contract Amendment, or any Contract extension.	All Bidders
GR-369	The Bidder will provide comprehensive turnover training to the State, Stakeholders, and the Successor Bidder(s) staff, as required for the successful adoption and operation of the system and operational component(s) to the fulfillment of the State's obligations to its Stakeholders, Vermont Medicaid Enterprise Bidders, and operational users for delivery of Medicaid and non-Medicaid programs.	All Bidders
GR-370	The Bidder will provide training to the State, its agents, and Successor Bidder(s).	All Bidders
GR-371	The Bidder will, at no cost to the State, be responsible for and correct any defects introduced by the Bidder prior to turnover or that were caused by lack of support at turnover, as may be determined by the State. The Bidder will provide a corrective action plan for all defects identified by the State.	All Bidders
GR-372	The Bidder will submit Turnover and Closeout Corrective Action sub-plans within a timeframe agreed upon between the Bidder and the State based on the criticality and business impact of the defect, no later than within 20 business days of notification by the State of a system defect.	All Bidders
GR-373	The Bidder will generate and provide all State-requested documentation and data for inclusion into a procurement library within 60 business days of the State's request as part of the turnover and closeout activities.	All Bidders
GR-374	The Bidder will cooperate with the State and the Successor Bidder(s) for finalization of the Bidder to Successor Bidder(s) staff transition plan.	All Bidders
GR-375	The Bidder will cooperate and collaborate with the Successor Vendor and provide primary, and back-up consultation support while the Successor Vendor ramps up to take over the functionality previously supplied by the Bidder.	All Bidders

2.4.17. System Certification

SoV requires Federal certification of the modernized MES modules using the most current CMS Outcomes Based Certification (OBC) process and criteria as a mandate to maximize Federal funding for system operations under Chapter 11 of the CMS State Medicaid Manual (SMM). To obtain Federal certification, the Bidder must plan to fully cooperate with the State and its MES Stakeholders, including all MES Bidders whose products and/or ancillary services interface with the MDWAS system.

A key component of obtaining Federal certification is developing solutions with an eye toward the negotiated certification outcomes and requirements. Bidders propose and implement solutions that align with SoV's negotiated outcomes and solution requirements. As part of the initial DDI Phase, the Bidder's approach must include continuous validation of the solution against these requirements and user stories to ensure compliance.

The Bidder will develop, maintain, and follow a SoV-approved approach to obtaining certification through ([DEL – 15; RFP Section 2.5.15](#)) the Certification Management Plan (CMP) This plan will outline roles and responsibilities for all MES Stakeholders to ensure Federal certification is achieved. This CMP must account for the Bidder's involvement in capturing necessary data and information, training, preparing documentation, and preparation for milestone reviews. All Certification Task phases and activities must be encompassed within the plan.

As part of achieving certification, the Bidder will be responsible for identifying and satisfying all the certification evaluation criteria, benchmarks, metrics, and approved KPIs in addition to any supporting documents, data, and information requested by CMS as required during the Federal certification process and activities. The Bidder must ensure continuity in the staffing of the various business and technical operations throughout completion during the Federal certification process and activities, including as required, onsite or remote follow up to resolve any identified compliance issues relative to Federal certification.

During the certification process, the Bidder must prove functional equivalence to the satisfaction of CMS. This includes all artifacts, data, and/or information anticipated by CMS for the certification review. These artifacts, data, and/or information include items such as the OBC intake forms, evaluation criteria checklist, KPI/Metrics calculations, and KPI reporting forms/submissions in addition to the CMS Conditions and Standards (C&S).

Table 22: System Certification Requirements

REQ ID	System Certification Requirements	Scope
GR-376	The Bidder will deliver the necessary information and content to the State that makes it possible to provide a (DEL – 15; RFP Section 2.5.15) CMP, describing the process the Bidder will use to support CMS certification of a multi-Bidder, integrated, enterprise-wide Medicaid solution. The Bidder will remain current with changes made to the certification requirements and update its plan accordingly. The CMP will include and comply with the following: a) All Federal certification requirements outlined in the CMS State Medicaid Manual (SMM) b) All intake review, certification review, and operational readiness review requirements as defined by the State and CMS under the Outcomes Based Certification (OBC) process.	All Bidders
GR-377	The Bidder will support Federal certification efforts from contract execution through CMS sign-off/approval of certification of both the initial systems/services and for any enterprise-wide modularity that may be integrated with the MDWAS system over the life of the contract.	All Bidders
GR-378	The Bidder will provide ongoing support for compliance with established Key Performance Indicator (KPI) metrics in support of all Federal certification efforts over the life of the contract.	All Bidders
GR-379	The Bidder will support the State in and throughout the entire CMS/Federal certification process as it relates to the implementation of the MDWAS, with any action items or requests/recommendations being completed by the Bidder within five business days unless otherwise agreed upon by the State. This support includes all work necessary to resolve CMS OBC action items or corrective actions, at no additional cost to the State.	All Bidders
GR-380	The Bidder will provide architecture and design that complies with CMS Conditions and Standards (C&S) to ensure enhanced Federal funding.	All Bidders
GR-381	The Bidder will provide an identified certification lead to support all certification activities throughout all certification phases, activities, and processes over the life of the contract.	All Bidders
GR-382	The Bidder will provide subject matter expertise to answer questions or provide insight during the certification process, including onsite, in person interviews.	All Bidders
GR-383	The Bidder will prepare all reports and documentation necessary for submission to CMS to support all certification reviews.	All Bidders
GR-384	The Bidder will provide source documentation and preparing certification folders that include the MDWAS-specific CMS State Medicaid Manual and CMS required documentation, reports, requirement/outcome crosswalks, evaluation criteria artifacts/materials, required	All Bidders

REQ ID	System Certification Requirements	Scope
	evidence/testing scenarios, and MITA capability supporting documentation.	
GR-385	The Bidder will prepare updated system documentation for submission to the State and CMS 45 business days prior to CMS certification reviews.	All Bidders
GR-386	The Bidder will provide both system and business operations staff to support the State in the completion of the MDWAS specific CMS required certification forms, checklists, evidence, reports, materials, and required artifacts.	All Bidders
GR-387	The Bidder will provide an updated version of the systems documentation following CMS certification reviews within 20 business days following the completion of any subsequent certification review date for all certification phases throughout the life of the Contract.	All Bidders
GR-388	The Bidder will update the data element dictionary following the MDWAS-specific CMS certification gate/milestone reviews within 20 business days following the completion of any certification review date.	All Bidders
GR-389	The Bidder will provide system access and/or a walkthrough of the designated facility and operations site, if required by the State or the CMS certification team. The State will provide the Bidder with advanced notification of such a request.	All Bidders
GR-390	The Bidder will prepare and develop cross reference matrix of the MDWAS-specific required data elements for each certification review.	All Bidders

2.5. Required Deliverables

During the course of the engagement, SoV expects a number of key, required deliverables to be completed that work to establish the critical framework necessary to manage the MDWAS engagement. It will be critical for the Bidder, upon contract execution, to direct resources to begin the tasks of completing required deliverables and actively begin to manage and oversee the entire project. SoV expects that the Bidder will begin the task of scheduling necessary planning meetings, requirements validation sessions, and formation of all boards and committees will mark the beginning of this effort and continue with the creation and updating of project plans and project deliverables.

A key component of the project, starting with implementation and continuing through turnover and closeout, is the delivery, maintenance, and acceptance of project deliverables. Project deliverables are comprised of the documents and work products needed to manage the project. SoV requires the Bidder to develop project deliverables in accordance with the requirements contained within this section and additional global requirements sections as noted in each deliverable table below. The successful implementation and completion of project deliverables will require the Bidder to demonstrate exceptional organizational and project management skills, including interpersonal skills, technical expertise, technical writing, and administrative skills.

SoV expects the Bidder to adhere to and understand the project timeline and phases outlined within RFP [Section 1.2](#) and has laid out a clear schedule in which Deliverable Expectations Documents (DEDs), Deliverables (DELs), and update frequency to all previously approved deliverables should occur in RFP [Section 2.5](#). Although independent payment structures are currently not associated with completion and approval of singular deliverables, it is understood that successful and timely completion/approval of all DEDs, DELs, and updates are directly related to the approved release of milestone/phase-based completion payments and/or monthly operational invoice withholds. SoV requires the Bidder, at a minimum, to complete the following list of Project deliverables:

DEL – 1, Project Management Plan (PMP)

DEL – 2, Project Management Repository (PMR)

DEL – 3, Incident Reporting Form (IRF)

DEL – 4, Business Continuity, Cyber Incident Response, and Disaster Recovery Plan (BC/CIR/DR)

- DEL – 5, System Security Plan (SSP)
- DEL – 6, Risk Management Plan (RMP)
- DEL – 7, Business Analysis Plan (BAP)
- DEL – 8, Business Design / System Design Document (BD/SDD)
- DEL – 9, Implementation Plan (ImP)
- DEL – 10, Change Management and Modification Pool Plan (ChMP)
- DEL – 11, Data Management Strategy (DMS)
- DEL – 12, Data Integration / Interface Design and Control Document (DIID&CD)
- DEL – 13, System Testing Plan (STP)
- DEL – 14, Quality Management Plan (QMP)
- DEL – 15, Certification Management Plan (CMP)
- DEL – 16, Communication Plan (ComMP)
- DEL – 17, Operating Procedures Guide (OPG)
- DEL – 18, User Training Plan (UTP)
- DEL – 19, Release Management Plan (ReIMP)
- DEL – 20, System Maintenance Support Plan (SysMSP)
- DEL – 21, Help Desk Plan (HDP)
- DEL – 22, Performance Management Plan (PerfMP)
- DEL – 23, Turnover and Closeout Plan (TO&COP)

Each deliverable table below includes the foundational parameters and delivery expectations for all 23 required deliverables. Additional details, requirements, and expectations for each deliverable may also be contained within designated subsections of the RFP. The Bidder is encouraged to review all deliverable and global requirements linked to the deliverable, as the combination of section text and requirements creates and frames the State’s expectations for successful completion and acceptance of the deliverables and proposed solution. The Bidder must acknowledge and address all requirements in accordance with [Section 4.0](#) Proposal Responses. The Bidder should provide its response to all required deliverables in Part 5: IMPLEMENTATION/PROJECT MANAGEMENT APPROACH and PART 6: TECHNICAL SERVICES in Attachment C - State of Vermont Bidder Response Form.

2.5.1.DEL – 1 Project Management Plan (PMP)

Deliverable (DEL) Name:		Project Management Plan (PMP)	
DEL No.	DEL - 1	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Fifteen (15) business days post Contract Execution		
DEL Due Date	Thirty (30) business days post Contract Execution		
Update Frequency:	Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			
The Project Management Plan (PMP) is considered the formal, approved document that defines how the project is executed, monitored, and controlled. It may be a summary or a detailed document that			

Deliverable (DEL) Name:	Project Management Plan (PMP)
<p>should include a fully resourced project schedule (e.g., Work Breakdown Structure [WBS] from MS Project) inclusive of defined milestones and task dependencies, additional subsidiary management plans (as needed), and other planning documents associated with information technology modernization projects. Additionally, this plan should include the approach to how the Bidder will report and monitor the overall project health and status. The PMP is subject to State review and approval. Bidders are requested to identify what they would propose as content for the PMP, and to refer to the State of Vermont EPMO website for guidance on standards, templates, and processes (https://epmo.vermont.gov/).</p>	

2.5.2.DEL – 2 Project Management Repository (PMR)

Deliverable (DEL) Name:	Project Management Repository (PMR)		
DEL No.	DEL - 2	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Fifteen (15) business days post Contract Execution		
DEL Due Date	Thirty (30) business days post Contract Execution		
Update Frequency:	Continual maintenance during contract, updates within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			
<p>The Project Management Repository (PMR) is a comprehensive electronic repository of all documents and various project-related materials. The Bidder is required to continually maintain, update, and provide version control of all documents/materials contained within the repository; ensuring that artifacts contained are current. The repository should be searchable and indexed for users to locate artifacts/materials quickly and maintain all project-related tools (e.g., requirements management tools) and performance dashboards to keep the State updated on project/system status and health. The PMR is subject to State review and approval. Additional items that might be contained in the repository include, but not be limited to:</p> <ul style="list-style-type: none"> a) Contact/Phone Lists b) Business Process Models c) Workflow Designs d) RFP and proposal documents with requirements and proposal responses linked to the Requirements Traceability Matrix Tool (RTMT) for requirements validation e) Design decisions linked to RFP requirements, proposal responses, and RTM data f) Detailed design documents (DDD), test results, and other project deliverables g) Schedules and calendars h) Microsoft Project work plan i) Minutes and agendas j) Issue tracking tool and other documents k) Policy documentation l) System documentation m) Change orders, specification orders, and related documents n) All project deliverables as listed in RFP Section 2.5 			

Deliverable (DEL) Name:	Project Management Repository (PMR)
<ul style="list-style-type: none"><li data-bbox="321 205 1419 268">o) Additional items learned through the project initiation and planning process or other items related to the project over the lifetime of the system.	

2.5.3.DEL – 3 Incident Reporting Form (IRF)

Deliverable (DEL) Name:		Staffing Management Plan (SMP)	
DEL No.	DEL - 3	RFP Sec.	Section 2.4.6 – Maintenance Management
DED Due Date	Not Applicable (N/A)		
DEL Due Date	Not Applicable (N/A)		
Update Frequency:		Not Applicable (N/A)	
Description:			
<p>The Incident Reporting Form (IRF) is a State standard template that requires Bidders to consider carefully all findings related to this incident's Root Cause Analysis (RCA) as these findings, as well as their corrective measures, may impact the project. The template requires capture of incident details including, but not limited to, the date occurred/reported/resolved, the severity, the priority, the resolution status, points of contact, the type of incident, incident details, the chronology of events, probable root cause, corrective actions, and preventive actions</p>			

2.5.4.DEL – 4 Business Continuity, Cyber Incident Response, and Disaster Recovery Plan (BC/CIR/DR)

Deliverable (DEL) Name:		Business Continuity, Cyber Incident Response, and Disaster Recovery Plan (BC/CIR/DR)	
DEL No.	DEL – 4	RFP Sec.	Section 2.4.9 – Continuity of Operations
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		
Update Frequency:		Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State	
Description:			
<p>Business Continuity, Cyber Incident Response, and Disaster Recovery Plan (BC/CIR/DR) is a set of processes and techniques used to help the Bidder and the State recover from a disaster, a specific testing plan/schedule for bringing systems back to operational status, in order for the systems to continue and/or resume routine business operations. This plan needs to be aligned to federal Emergency Management Agency (FEMA), NIST CP-2 and NIST 800-53 standards, MARS-E-2-0 standards, and meet all Federal (CMS Standard and the associated Risk Management Handbook Procedures; CMS-CISO-2014-vIII-std4.4 or its replacement) and State standards. The BC/CR/DR plans must at a minimum conform to ISO/IEC 27031:2011 and ISO 20071:2013, and sufficiently address the challenges represented within a multi-Supplier, integrated systems solution. The BC/CIR/DR is subject to State review and approval.</p>			

2.5.5.DEL – 5 System Security Plan (SSP)

Deliverable (DEL) Name:		System Security Plan (SSP)	
DEL No.	DEL - 5	RFP Sec.	Section 2.4.9 – System Compliance and Security
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		

Deliverable (DEL) Name:		System Security Plan (SSP)	
Update Frequency:		Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State	
Description:			
<p>The System Security Plan (SSP) is a formal, strategic document that addresses how the Bidder will comply with state and federal privacy mandates/laws, as it relates to the MDWAS system and business solution engagement. The plan should include a description of the Bidder's proposed privacy, security, and access management approach, controls, frameworks, and structure for all systems, facilities, networks, applications, personnel/contractors, and business services under the scope of this RFP. The plan should also detail the roles and responsibilities of all assigned privacy officials and staff engaged to implement and maintain the SSP for the solution. Finally, the SSP will discuss and provide their approach and schedule for completing required system security testing, assessments, and regular system monitoring activities such as:</p> <ol style="list-style-type: none"> Information system audits and activity reviews Access reporting Security testing (e.g., penetration testing) Service and Organization Controls (SOC) 2 report Third party assessments (e.g., Security and Privacy Controls Assessment, Security Controls Review, Security Controls Review, Vulnerability Scans) Plan of Action and Milestones (POA&M) plan for tracking, planning, and implementing required corrections/security protocols to resolve information security weaknesses Compliance with State Sanction policies and mandates Additional CMS/Federal and/or State security assessments/testing/audits as required by the State and/or CMS. <p>The SSP is subject to State review and approval. All CMS and Agency of Human Services (AHS) required testing, assessments, and monitoring reports, letters, and results should be provided upon State request.</p>			

2.5.6.DEL – 6 Risk Management Plan (RMP)

Deliverable (DEL) Name:		Requirements Management Plan and Validation Document (ReqMPVD)	
DEL No.	DEL – 6	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		
Update Frequency:		Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State	
Description:			
<p>The Requirements Management Plan and Validation Document (ReqMPVD) is a formal, written document that specifies the Bidder's approach/plan to elicit, document, analyze, and manage MDWAS project requirements efficiently and effectively throughout the contract life cycle (inclusive of transition of services/solution to another Bidder). The ReqMPVD should contain a comprehensive requirements management process that is aligned to industry standards and is supported by a robust requirements</p>			

management tool that can both produce requirements matrices/crosswalks/validation documents and is capable of integration with State-approved software development applications (e.g., Azure DevOps). Both the ReqMPVD and requirement management tools are subject to State review and approval.

2.5.7.DEL – 7 Business Analysis Plan (BAP)

Deliverable (DEL) Name:		Business Analysis Plan (BAP)	
DEL No.	DEL - 7	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		
Update Frequency:	Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			
<p>The Business Analysis Plan (BAP) is a formal, written document that specifies the Bidder’s approach/plan to elicit, document, analyze, and manage project requirements efficiently and effectively throughout the contract life cycle (inclusive of transition of services/solution to another Bidder). The BAP should contain a comprehensive requirements management process that is aligned to industry standards and is supported by a robust requirements management tool that can both produce requirements matrices/crosswalks/validation documents and is capable of integration with State-approved software development applications (e.g., Azure DevOps). Both the BAP and requirement management tools are subject to State review and approval.</p>			

2.5.8.DEL – 8 Business Design / System Design Document (BD/SDD)

Deliverable (DEL) Name:		Business Design / System Design Document (BD/SDD)	
DEL No.	DEL - 8	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Ninety (90) business days prior to the start of Certification activities		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Business Design / System Design Document (BD/SDD) is a document that illustrates and provides the overall technical and business design of the MDWAS system solution. This document provides adequate detail that enables stakeholders to understand how the solution is built and defines all elements of the system solution. It describes and illustrates the system architecture and components; additionally, the document links all system architecture, components, and business processes/services to parent and child functional and nonfunctional requirements, user stories, and test cases as recorded and managed under the BAP and System Testing Plan. The BD/SDD, which is subject to State review and approval, should also include, but not be limited to the following items:</p> <ul style="list-style-type: none"> a) System/Solution design and development approach and alternatives b) All system solution data models (e.g., Logical Data Model, Conceptual Data Model, and Physical Data Model) c) Nano-business design of each system solution component 			

Deliverable (DEL) Name:	Business Design / System Design Document (BD/SDD)
d) Overall solution/system architecture diagram e) Functional, non-functional, and technical design specifications f) Data flow diagram(s) g) Approach to data transition (e.g., strategy, assumptions, preparations, schedule, specifications, and results reporting/ABC Report for transitioning data from source systems to the target system) h) Approach to data integration/testing and synchronization.	

2.5.9.DEL – 9 Implementation Plan (ImP)

Deliverable (DEL) Name:		Implementation Plan (ImP)	
DEL No.	DEL - 9	RFP Sec.	Section 2.4.1 – Project and Requirements Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Forty (40) business days prior to Implementation date(s)		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
The Implementation Plan (ImP) is a document that describes how the MDWAS will be deployed, installed, and transitioned into an operational system. The plan contains an overview of the system, implementation strategy, descriptions of the major tasks involved in the implementation, the overall resources needed to support the implementation effort (such as hardware, software, facilities, materials, and personnel), overall schedule of the implementation effort, and any site-specific implementation requirements. The ImP is subject to State review and approval.			

2.5.10. DEL – 10 Change Management and Modification Pool Plan (ChMP)

Deliverable (DEL) Name:		Change Management and Modification Pool Plan (ChMP)	
DEL No.	DEL - 10	RFP Sec.	Section 2.4.5 – Change Management and Modification Pool
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		
Update Frequency:	Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			
The Change Management and Modification Pool Plan (ChMP) is a document that defines the governance (structure and processes) surrounding project/solution change and modifications, while identifying the activities and roles/resources necessary to manage and control change throughout all phases of the contract life cycle. Additionally, the State expects the Bidder to participate in enterprise-wide change management efforts, and thereby requires the Bidder to address its approach and process for collaborating with multiple vendors in an enterprise solution where source system changes could have direct impacts on the MDWAS. The ChMP is subject to State review and approval.			

2.5.11. **DEL – 11 Data Management Strategy (DMS)**

Deliverable (DEL) Name:		Data Management Strategy (DMS)	
DEL No.	DEL - 11	RFP Sec.	Section 2.7.4.1 – Master Data Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Ninety (90) business days prior to the start of Certification activities		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Data Management Strategy (DMS) is a document that details the Bidder’s approach to supporting and collaborating with the State regarding the State’s overall data management and governance policies and principals. As the State continues to document and develop its organizational approach to data management, it is expected that the Bidder will support and collaborate with the State to mature the strategy to effectively maintain and operate the State and future data integrations. The DMS is subject to State review and approval.</p>			

2.5.12. **DEL – 12 Data Integration / Interface Design and Control Document (DIID&CD)**

Deliverable (DEL) Name:		Data Integration / Interface Design and Control Document (DIID&CD)	
DEL No.	DEL - 12	RFP Sec.	Section 2.4.11 – Documentation Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Ninety (90) business days prior to the start of Certification activities		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Data Integration / Interface Design and Control Document (DIID&CD) is a comprehensive document that outlines, details, and provides the Bidder’s overall approach to data integration and data transition coupled with the identification and definition of all source and downstream/subsystem integration points throughout the solution. This document will provide both a visual (e.g., drawings, diagrams, tables) and textual representation of the underlying interfaces (both implemented/existing and planned) and probable inputs to and all potential outputs from the MDWAS. This document supports and expands upon the integration points and interfaces presented in the Business Design / System Design Document (BD/SDD). The DIID&CD is subject to State review and approval.</p>			

2.5.13. **DEL – 13 System Testing Plan (STP)**

Deliverable (DEL) Name:		System Testing Plan (STP)	
DEL No.	DEL - 13	RFP Sec.	Section 2.4.7 – Testing Management
DED Due Date	Ninety (90) business days post Contract Execution		
DEL Due Date	Eighty (80) business days prior to system testing start date.		
Update Frequency:	Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			

Deliverable (DEL) Name:	System Testing Plan (STP)
<p>The System Testing Plan (STP) is a formal document that outlines the Bidder’s overall/master approach to testing the functionality of the MDWAS, software, applications, systems, integrations, and interfaces. The STP should align with industry best practices and standards established by organizations and documentation, including:</p> <ul style="list-style-type: none"> a) ISO/IEC 29119-3:2021 <ul style="list-style-type: none"> Consists of the following standards: <ul style="list-style-type: none"> • — Part 1: Concepts and definitions • — Part 2: Test processes • — Part 3: Test documentation • — Part 4: Test techniques b) ISO/IEC 25010:2011 c) ADA Compliant 508 usability d) ISO/IEC 25000:2014 e) ISO/IEC 25051:2014 (overlaps with 29119:2) f) Testing Maturity Model (TMM) g) Software Engineering Institute (SEI) h) Software Testing Qualification Board (ISTQB) or Association for Software Testing (AST) i) American National Standards Institute (ANSI) <p>Additionally, the STP provides detail of the Bidder’s overall testing objectives, processes/strategy, test scenarios/cases/scripts, tools/RTM, schedule, necessary resources, reporting and/or documentation of results. The Bidder should also include parameters around items in scope and out of scope for testing, who will do the testing/provide User Acceptance Testing (UAT)/Systems Integration Testing (SIT) support, testing levels, entry/exit criteria, pass/fail criteria, defect management process, and training needs resulting from the testing outcomes. In short, the STP defines the comprehensive testing life cycle methodology and MDWAS testing effort to be deployed in support of the comprehensive MDWAS. The STP is subject to State review and approval.</p>	

2.5.14. **DEL – 14 Quality Management Plan (QMP)**

Deliverable (DEL) Name:		Quality Management Plan (QMP)	
DEL No.	DEL - 14	RFP Sec.	Section 2.4.3 – Quality Management
DED Due Date	Forty (40) business days post Contract Execution		
DEL Due Date	Forty (40) business days prior to the start of Certification activities		
Update Frequency:	Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State		
Description:			
<p>The Quality Management Plan (QMP) documents the necessary strategy/approach required to effectively manage project, system, business, and operational quality throughout the overall life cycle of the contract. This plan works to develop, define, and document a mutually collaborative approach to managing and improving the overall quality of the Bidder system and services. The State recognizes that the QMP and the Performance Management Plan (PerfMP) are intricately linked, therefore the Bidder should work collaboratively to build the QMP with the State to achieve, maintain, and proactively evolve both AHS goals/objectives and MDWAS outcomes, as currently defined by</p>			

CMS, Vermont AHS, and/or the Vermont State Medicaid Plan. The State expects the Bidder to employ and align to industry aligned continuous quality improvement standards, procedures, and measurement criteria across all areas of the solution. Finally, the Bidder should also define the responsibilities, roles, and authorities necessary to meet all quality expectations expected of a MDWAS. The State encourages the Bidder to provide a proactive approach to evolve and elevate the quality of project, system, business, and operational services provided over the life cycle of the contract. The QMP is subject to State review and approval.

2.5.15. **DEL – 15 Certification Management Plan (CMP)**

Deliverable (DEL) Name:		Certification Management Plan (CMP)	
DEL No.	DEL – 15	RFP Sec.	Section 2.4.17 – System Certification
DED Due Date	Forty (40) business days post Contract Execution		
DEL Due Date	Forty (40) business days prior to the start of Certification activities		
Update Frequency:		Maintained annually as needed for CMS Cert. activities for additional data transitions.	
Description:			
<p>The Certification Management Plan (CMP) is a document that outlines and defines a unified, collaborative approach to achieving CMS certification of the MDWAS. The CMP must describe the certification processes to which the Bidder will plan, execute, and manage on behalf of the State to demonstrate alignment and compliance with all CMS-approved/State-negotiated/required certification outcomes, evaluation criteria, artifacts, Key Performance Indicators (KPIs), and metrics. Additionally, this plan will identify and document the timeline and resources necessary to support the State throughout the entire certification process/reviews, up and through both MDWAS-specific and enterprise-wide certification, if necessary/required. The Bidder will update all plans, artifacts, and documents necessary for certification reviews, at the direction and request of the State. The CMP is subject to State review and approval.</p>			

2.5.16. **DEL – 16 Communications Management Plan (ComMP)**

Deliverable (DEL) Name:		Communication Plan (ComMP)	
DEL No.	DEL - 16	RFP Sec.	Section 2.4.13 – Communications Management
DED Due Date	Thirty (30) business days post Contract Execution		
DEL Due Date	Sixty (60) business days post Contract Execution		
Update Frequency:		Within twenty (20) business days of any change, annually by January 31, and/or as requested by the State	
Description:			
<p>The Communications Management Plan (ComMP) documents the Bidder's approach to overall project and operational communication needs of all identified stakeholders, with specificity and focus on communicating clearly with the State and other approved stakeholders. This plan is an essential roadmap for the Bidder because it defines the audience, methods, means, modes, and frequencies to which project and operational information is delivered to internal and external stakeholders. Additionally, the ComMP defines the ways in which the Bidder looks to survey/measure communication effectiveness and results, so that the feedback can be used to improve the processes and parameters of which communications are delivered. The ComMP is subject to State review and approval.</p>			

2.5.17. **DEL – 17 Operating Procedures Guide (OPG)**

Deliverable (DEL) Name:		Operating Procedures Guide (OPG)	
DEL No.	DEL - 17	RFP Sec.	Section 2.4.14 – Training Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Operating Procedures Guide (OPG) is a document that encompasses the full set of business and system processes steps/workflows that outline how a service, product, or outcome should be delivered, how a situation is to be handled, or what policy/process is to be followed. The OPG ensures consistency and quality regardless of who, what, when where and why. Additionally, this guide should include procedures and guidance considering transitional system/business process phase changes to reflect the user needs of the project phase. The guide should also include pictorial representations, when appropriate, to help educate users surrounding the approved process to emphasize and maintain policy compliance. Additionally, the State expects that this guide provides high-level behind the scenes (background) system processing information, for the user to understand and be aware as to the overall expected system run times and performance.</p>			

2.5.18. **DEL – 18 User Training Plan (UTP)**

Deliverable (DEL) Name:		User Training Plan (UTP)	
DEL No.	DEL - 18	RFP Sec.	Section 2.4.14 – Training Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The User Training Plan (UTP) is a formal document that defines and describes the Bidder's overall methodology and approach to the development, planning (e.g., annual training schedule), and delivery of user-focused instruction for all system-based and business/process requirements throughout the life cycle of the contract engagement. Additionally, this plan identifies and defines all necessary/critical training materials/modes, user guides, and ancillary materials that the Bidder must construct/develop for user comprehension and retainage of knowledge. The UTP also defines the approach to user training evaluation and the quality improvement processes that must be implemented to assist both the State and Bidder in measuring both user comprehension of the system/business and/or user knowledge gaps and deficiencies that need to be addressed or corrected. The UTP is subject to State review and approval.</p>			

2.5.19. **DEL – 19 Release Management Plan (ReIMP)**

Deliverable (DEL) Name:		Release Management Plan (ReIMP)	
DEL No.	DEL - 19	RFP Sec.	Section 2.4.6 - Maintenance Management
DED Due Date	Forty (40) business days post Contract Execution		
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		

Deliverable (DEL) Name:	Release Management Plan (ReIMP)
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State
Description:	
<p>The Release Management Plan (ReIMP) establishes the Bidder's approach to the technical and administrative direction and surveillance for the management of system configuration items (e.g., software, hardware, and documentation) associated with the MDWAS project that are to be placed under configuration control. This document template, as located in the Procurement library – DVHA Release Management Template.V1.1, specifically defines the Bidder's approach to identifying, defining, and baselining configuration items (CIs), controlling/scheduling/communicating all modifications and releases, reporting/recording of CIs and/or any requested modifications, ensures that the CIs are completed, consistent and correct, as well as ensures that all related system/training documentation is updated and published for review and approval by the State. The ReIMP is subject to State review and approval.</p>	

DEL – 20 System Maintenance Support Plan (SysMSP)

Deliverable (DEL) Name:		System Maintenance Support Plan (SysMSP)	
DEL No.	DEL - 20	RFP Sec.	Section 2.4.6 - Maintenance Management
DED Due Date	Forty (40) business days post Contract Execution		
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The System Maintenance Support Plan (SysMSP), subject to State review and approval, should identify and define the Bidder's overall approach to comprehensive system maintenance of the MDWAS. The SysMSP should also address the Bidder's approach to making changes to existing functionality and features that are necessary to continue proper system and/or operational services. The plan should include significant detail around all maintenance activities necessary for successful operations, maintenance, and performance of the system, including but not limited to:</p> <ol style="list-style-type: none"> routine maintenance data corrections executing maintenance, performance, and defect reports system maintenance scheduling/communication to State-authorized stakeholders root cause analysis applying change requirements to software, hardware, or network upgrades configuration changes State rule changes infrastructure policy impacts, and corrective or adaptive maintenance. 			

2.5.20. DEL – 21 Help Desk Plan (HDP)

Deliverable (DEL) Name:		Help Desk Plan (HDP)	
DEL No.	DEL – 21	RFP Sec.	Section 2.4.15 - Help Desk and Support
DED Due Date	Sixty (60) business days post Contract Execution		

Deliverable (DEL) Name:		Help Desk Plan (HDP)	
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Help Desk Plan (HDP) is a document that identifies and defines the Bidder's approach and committed resources to user/customer incident resolution, helpdesk escalation process, and/or service request management. The plan details the manner, processes, and tools the Bidder will utilize to manage all MDWAS user requests for assistance surrounding the system and operational business solutions that have been deployed/implemented. It will provide a detailed explanation and process for self-service options available for customers who want to resolve incidents quickly and independently. Finally, the plan will outline the Bidder's approach to quality customer service through the use of a feedback mechanism for customer satisfaction ratings/evaluations; providing the process in which collected metrics are used to determine the need to construct and deliver additional user trainings. The HDP is subject to State review and approval.</p>			

2.5.21. **DEL – 22 Performance Management Plan (PerfMP)**

Deliverable (DEL) Name:		Performance Management Plan (PerfMP)	
DEL No.	DEL – 22	RFP Sec.	Section 2.4.4 - Performance Management
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Sixty (60) business days pre-Operational Go-Live Date		
Update Frequency:	Update with each DDI Phase, within twenty (20) business days of any change, for all Certification Reviews, Annually, and/or as requested by the State		
Description:			
<p>The Performance Management Plan (PerfMP) is a document that establishes clear contractual (business and system/information technology) performance expectations through which all stakeholders can easily understand what is expected under the auspices of the contractual engagement. The plan also defines both the consequences and corrective action process for Bidder performance noncompliance. The State expects the Bidder to define and implement a collaborative process and approach to consistently meet and re-evaluate contractual Service Level Agreements (SLAs), Systems/Business Outcomes (as defined through CMS outcomes-based certification processes) and KPIs as the maturity of the implemented system and business processes evolves over the life cycle of the engagement. The PerfMP is subject to State review and approval.</p>			

2.5.22. **DEL – 23 Turnover and Closeout Plan (TO&COP)**

Deliverable (DEL) Name:		Turnover and Closeout Plan (TO&COP)	
DEL No.	DEL – 23	RFP Sec.	Section 2.4.16 - Turnover and Closeout
DED Due Date	Sixty (60) business days post Contract Execution		
DEL Due Date	Forty (40) business days prior to the start of Operations		
Update Frequency:	Maintained and updated annually as needed and directed by the State		
Description:			

Deliverable (DEL) Name:	Turnover and Closeout Plan (TO&COP)
<p>The Turnover and Closeout Plan (TO&COP) is a formalized document that details the Bidder's approach to the contractual/engagement turnover/closeout phase of the complete, or any portion/part, of the MDWAS solution. The plan provides specification surrounding the necessary processes and analysis required to define timeline, identify necessary resources, construct a Responsible, Accountable, Consulted, Informed (RACI) matrix for all processes/activities, and update/construct documents/artifacts (e.g., manuals, documentation/guide updates) deemed necessary to complete a formal closeout of business with the MDWAS Bidder. The plan should establish the turnover and closeout acceptance criteria, to which the State requires to formally end/terminate/transition the solution(s) and/or service(s). When applicable, the plan should also outline additional considerations for the MDWAS contracted solution, such as facility/property/asset management, records/documentation storage/release/destruction, disposition of subcontracted services and vendors, along with a detailed staffing/personnel resources plan for the work/phase.</p>	

2.6. High-Level MDWAS (MDL, ADW, and DAR) Future State Vision and Business Value(s):

State Vision: The following user stories depict the State's primary business requirements for the MDWAS. In the user stories below, AHS Management is the actor articulating the capabilities desired in the MDWAS on behalf of the AHS Secretary's Office, Department Commissioners, all business users, and stakeholders.

User Story ID	Narrative
MDWAS-US-00001	As AHS Management, I want to improve the way the State of Vermont learns and makes decisions about policy, technology, budgets, and how we lead health care reform, so that we can maximize limited resources and target our investments strategically and holistically.
MDWAS-US-00002	As AHS Management, I want to leverage quality data and information, so that we can create the opportunity to continuously improve, incentivize innovation, and see a return on investment across the Vermont human services enterprise.
MDWAS-US-00003	As AHS Management, I want to leverage the State's existing Analytics Data Warehouse (ADW) to be the Vermont Medicaid enterprise data warehouse (EDW) so that the MDWAS solution aligns with the State's commitment to reusing existing technologies and adopting a modular approach to modernizing the Vermont MES, and with the State's long-term vision to leverage data and information from all solutions across the Vermont human services enterprise.

The Medicaid Data Warehouse and Analytics Solution (MDWAS) is intended to transform how the Vermont business teams interact with their data to make informed and timely decisions regarding the operational support and management of the State's healthcare program. To that end, this overview is intended to describe the overall solution vision that the State requests that the Bidders address in their writing. A Bidder must explain how key aspects of this vision are supported by their solution and services approach.

The MDWAS must establish data ingestion processes to accept, validate, transform, and store the detailed data. The primary data sources are the MMIS data store (encompassing, for example, the Claims, Provider, Member, Financial, Managed Care, Third Party Liability (TPL), Authorizations, and Reference data), the Pharmacy Benefits Management (PBM) data (e.g., Claims, Formulary, Drug Rebate), VT eligibility and enrollment data (e.g., Income data, Enrollment data, Buy-In), Electronic Visit Verification (EVV) data, and State licensure data.

The Vermont team understands that the organization, presentation, and navigation of this broad set of data is a challenging aspect of this initiative. The MMIS business areas alone have more than five thousand data elements. Vermont's goal is to establish an end-to-end solution encompassing data organization, storage, presentation and interaction mechanisms that increases the value proposition to the different business organizations in the state as well as to the different user types utilizing the data. The Bidder is to convey through their architecture writing as well as through detailed requirement responses how the solution

enables the broad set of users to be successful in creating ad hoc reports, consuming reports, navigating data visualizations, etc. A solution should ideally have numerous mechanisms for data presentation and access.

The infrastructure and environment approach envisioned for the MDWAS is one that supports flexibility and scalability. The state is not looking for a dedicated hardware environment but an infrastructure solution that could include leveraging a Bidder platform, a commercial cloud, etc. The Bidder is to be responsible for planning, establishing, and supporting the environment through the life of the contract.

The MDWAS must support the full spectrum of stakeholders and the associated user personas; everyone from business operations business analysts to financial program managers to healthcare policy analysts. The style, content, and presentation of the content needs to be appropriate for each targeted user.

The MDWAS must support the business operations of the program by providing timely and broad access to accurate data. We understand and expect that 'access to data' may be achieved through multiple components. Anticipated functionality includes the ability to create ad hoc reports and generate datasets from the detailed data using user-supplied criteria at run-time, the ability to quickly recall predefined reports or prompted reports from a reporting library, the ability to interactively research specific collections of data in real-time via data cube-like capabilities, etc. The solution must include a collection of tools that facilitate 'on-platform' analysis and development of advanced reports.

To achieve these goals, it is envisioned that the MDWAS implementation would require some degree of customized development. A solution would inherit the natural relationships of healthcare data but would then be customized where necessary to address the state-specific data needs, reporting requirements and desire to quickly structure the results in meaningful groupings for analysis. It is expected that the Bidder' approach should clearly identify the Bidder's strategy for delivering the solution within the context of a project schedule. A schedule which clearly lays out the forecasted activities that must be performed to deliver the Vermont-specific set of reporting and analysis capabilities. Vermont is looking for a solution that will provide the full set of desired reporting and analysis capabilities from within the platform. The MDWAS should not be used as a data source from which data must be exported to perform analysis and build reports. 'Data extraction' methodologies should only be necessary for limited use cases as opposed to a State-agnostic, non-specific, default approach.

Vermont is aware that there have been advancements in data warehousing technology and strategies that positively impact system performance. The Bidder must explain how their proposed strategy for the MDWAS directly impacts the user experience, including system responsiveness. Vermont is anticipating that the new system will deliver substantial performance improvement characterized by reports that can deliver results in seconds or minutes as opposed to the current experience of return times measured in minutes or hours. The state also understands that the solution may utilize multiple data storage, access, and recall techniques to meet this performance expectation. For example, focused data marts, in-memory data cubes, visual analysis, various types of data stores, prompt-driven reports, predefined reports, and caching may all play a part in a high-performance solution. The proposal must explain the strategy to delivering on this service expectation.

The core of the MDWAS is the data. A clear expectation is that the initial ingestion and subsequent operational data updates are performed in such a way as to deliver unquestioned data quality. Accordingly, the Bidder must bring industry aligned processes, controls and audits that will be applied to ensure data quality within the MDWAS.

Data may need to be augmented as certain elements are incorporated into the warehouse. Examples of data augmentation include, but are not limited to, capturing latitude/longitude attributes, applying state-specific business rules to create rollup values, member risk and clinical/disease classifications, etc. The Bidder must be expected to collaborate with the State on what specific data augmentations will be included in the MDWAS, how the data augmentations will be performed, and what is the strategy for how the results will be manifested to the user community.

In addition to the base MDWAS capabilities, the solution will also be expected to support:

- a) T-MSIS file generation
- b) T-MSIS direct data access to the most recent six months of submitted files for research purposes
- c) State reporting

- d) All Federal Mandated/Required reporting
- e) Healthcare Quality reporting including, but not limited to, the generation of HEDIS reporting metrics
- f) Program Integrity including ranking, profiles, exceptions, utilization comparisons, predictive analysis, and risk adjusted reporting
- g) Program Integrity Case Management
- h) Sandbox environment

For the MDWAS to maximize user engagement, the solution's training component must go beyond tool utilization training (general training requirements as provided in [section 2.4.14](#)– Training Management). The training must be user persona-specific and tailored to how each type of user will engage with the MDWAS. The training plan ([DEL – 18, User Training Plan](#)) must span the life of the contract, from UAT preparation through contract closeout. In addition to tool and report training, the solution's training component must also include data training. Data training would include, but not be limited to, the identification of critical data elements typically used for summarization, segmentation, eligibility determination, fund grouping and program decision making purposes. Vermont understands that formalizing the data training must be a collaborative effort to maximize its value. Regarding timing, scope, duration, content, and staffing, Vermont is looking for innovative and effective training experiences throughout the contract in order that the full value of the MDWAS can be realized.

In concert with the State's vision stated above, additional key objectives have been defined for the project, as listed below:

2.6.1. Comprehensive Suite of Enterprise Reports

Develop and support a comprehensive suite of enterprise reports utilizing a latitude of styles, including standard tabular, interactive visualization, geospatial presentation, dashboard, and combinations of these styles in a single presentation, in order to maximize report efficacy and maximize the potential target audience.

2.6.2. Vermont-Specific Reports

Develop and support Vermont-specific reports that address State and Federally mandated requirements.

2.6.3. PI and SURS Reporting and PI Case Tracking Functionality

Include Program Integrity (PI) and Surveillance and Utilization Review System (SURS) reporting functionality.

2.6.4. Healthcare Quality Measures

Provide the ability to determine and calculate specific to VT oversight of the healthcare program.

2.6.5. Comprehensive Tools and Processes

Implement comprehensive tools and processes and maintain adequate staffing to support the requisite data management functions to consolidate varied, disparate data across multiple systems and repositories.

2.6.6. Sandbox Environment

Provide a Sandbox environment where provisioned users from State advanced analytics teams can import External Data Files for temporary business needs such as statistical analysis, generating ad hoc reports or recurring data extract files, and applying health care grouping systems (e.g., Diagnosis Related Group (DRG)). ADW production data must be available for users to join to External Data Files that have been imported into the Sandbox.

2.6.7. Scalable and Extensible Solutions

Implement scalable and extensible solutions that readily accommodate the modification of existing data sources and, in particular, the addition of new data sources including the intended near-term

addition of a master person index (MPI) engine, the intended future modularization initiatives, or other sub-system replacements.

2.6.8. Analytics and Reporting Personnel

Assign knowledgeable and experienced analytics and reporting personnel with expertise in Federal and State reporting, complex analytic and statistical analysis, and program integrity to work with State staff to provide post-implementation continued education functionality training, report modification, new report creation, and new analysis initiative support.

2.6.9. Alignment with State's Vision

Align with the State's vision of transitioning from legacy, monolithic applications with siloed data to an evolved and integrated enterprise architecture based upon a centralized data warehouse and a business intelligence/analytics platform.

2.7. RFP System Requirements for MDL and DAR Solutions

The MDL Bidder will create and customize a consolidated repository to house structured and unstructured data from disparate Data Sources to support management and oversight of the Vermont Medicaid program. This includes the overall architecture, infrastructure, and security for the MDL. The proposed architecture must be scalable, extensible, and flexible to meet the State’s long-term vision and business needs. The proposed MDL solution must also meet data integrity, performance, security, and other technical requirements. Data Sources in scope for initial ingestion are listed in Section 1.1.1.1.

The DAR Bidder must propose a solution for instances in which disparate, external data need be temporarily imported into the data warehouse sandbox for further analysis.

Sections 2.7.1 – 2.7.9.3 contain the RFP System Requirements for the MDL and DAR solutions. Requirements indicating “All Bidders” are applicable to both the MDL and the DAR solutions.

2.7.1. Architecture and Environments

The solution must include secure warehousing environments that enable the development, testing, and production activities associated with a comprehensive warehousing solution. The data warehouse architecture must incorporate the State’s integration platform for the ingestion and distribution of data to and from the solution. The Bidder’s environment architecture strategy must support production, staging, user acceptance testing, training, system testing and performance testing functions. Additionally, the implemented architecture design must address the need to migrate data from new Data Sources into the data warehouse over time. Proposed presentation strategies must enable the business users to effectively interpret and navigate the detailed data attributes for effective analysis and reporting. All proposed framework and tools that will be implemented within the MDWAS sandbox environment must enable the State personnel to perform their advanced analytics. The Bidder’s solution must solve for the State’s need to perform large data extracts in those instances where the analyst must select and export data from the MDWAS platform (e.g., 'large' data extracts would be characterized by tens of millions of claims in a single data pull). Finally, it is expected of the awarded Bidder to deliver optimal query and reporting performance across the range of reports from ad hoc queries to data analysis, etc. It is the State’s expectation that proposed approaches and technologies will deliver turn-around times measured in the seconds and minutes, rather than minutes and hours.

Table 23: MDL and DAR Architecture and Environment Requirements

REQ ID	Architecture and Environment Requirements	Scope
SR-001	<i>(intentionally blank)</i>	
SR-002	The solution must include the development and implementation of a data presentation layer(s) for access by all State-authorized internal and external MES Stakeholders, based on their role and profile.	DAR
SR-003	The Bidder’s Presentation Layer Solution for reporting must provide access to all MDWAS data available to enterprise users.	DAR
SR-004	<i>(intentionally blank)</i>	
SR-005	The solution will provide and manage all system environment(s) (e.g., production, staging, testing, development as a minimum of physical environments). The solution must be able to support production, staging, user acceptance testing, training, system testing and performance testing functions.	All Bidders
SR-006	The solution will implement industry standard capabilities for infrastructure security, scalability, performance, backup, and ongoing maintenance applied to solutions that support MDWAS components and environments.	All Bidders
SR-007	The solution will use industry standard tools in the design and maintenance of the MDWAS solution (i.e., packages for source code management, data management, data modeling, job scheduling, etc.).	All Bidders

REQ ID	Architecture and Environment Requirements	Scope
SR-008	The solution will include the architecture design to provide the data stores and repositories required to support the essential MDWAS solution services and reference framework.	All Bidders
SR-009	<i>(intentionally blank)</i>	
SR-010	The solution will provide a production environment with all production source system data defined for inclusion in the MDW as part of the scope of work for this RFP.	MDL
SR-011	The solution for architecture design will include the ability to efficiently load and query high volumes of data (i.e., the ability to query, report and interactively navigate detail data spanning seven or more years).	DAR
SR-012	The solution will be adaptable and extensible to address and adjust to evolving State MES strategies and needs.	All Bidders
SR-013	The solution must be adaptable, and the Bidder will support operational changes to the solution based on source data updates. The Bidder support necessary for these changes includes the analysis and summary findings of overall solution impacts based on data source changes.	All Bidders

2.7.2. Data Models and Augmentation

The solution must include a State-specific, business-centric data model that aligns with the State’s data, business practices, and reporting needs. The model must support point-in-time reporting and yield optimal query performance. Additionally, the solution must enable the calculation and storage of new “value-add” data elements for Vermont-specific reporting purposes (e.g., address latitude/longitude and ‘roll up’ category codes). The State expects any potential Bidder to propose a data augmentation solution that will address existing limitations, including the calculation and storage of address latitude/longitude values, state-specific roll up codes, and member clinical classifications. Additionally, any Bidder proposed solution must account for how data models will be surfaced to State personnel and facilitate query and reporting initiatives.

Table 24: Data Models and Augmentation Requirements

REQ ID	Data Models and Augmentation Requirements	Scope
SR-014	The solution will include the design, development, implementation, and maintenance of an enterprise data model designed around State business practices.	All Bidders
SR-015	The solution will require State approval of all customized data model designs.	All Bidders
SR-016	<i>(intentionally blank)</i>	
SR-017	The solution will include MDW data modeling tool(s) to create, update, and maintain clear and consistent formats for all Conceptual, Logical, and Physical data models in accordance with State and Federal data standards, guidelines, and architecture.	All Bidders
SR-018	The solution will ensure data models are stored and versioned in a source control system.	All Bidders
SR-019	<i>(intentionally blank)</i>	
SR-020	<i>(intentionally blank)</i>	

2.7.3. Data Retention

The solution must include the appropriately designed and implemented databases, user schemas, and data marts necessary to fulfill the data needs underneath the State Business team business intelligence and analytics reporting. The solution must adhere to the data retention policies of the State and conform to State and Federal regulatory requirements and risk management guidelines. These policies should drive specifications for purging and archiving of data.

Table 25: Data Retention Requirements

REQ ID	Data Retention Requirements	Scope
SR-021	The solution will allow for retention of and access to data (e.g., data source files, administrative data, quality/audit data, Analytics/Reporting output, etc.) for a minimum of seven years and in compliance with State and Federal data retention policies and standards.	All Bidders

2.7.4. Security and Access

The solution must encompass complete security and access controls to ensure the protection of all warehouse data, provisions for controlling access to that data, management of all user accounts, and maintenance of access/audit information covering the comprehensive warehouse, analytics, and reporting system. Access to all data must be provided to users through a variety of channels, and all data must be retained and available per Federal/State specifications. The Bidder's solution is expected to solve for challenges beyond standard role-based access; additional functionality is expected to be employed to provide row/column filtering and appropriate data sharing restriction functionality.

Table 26: Security and Access Requirements

REQ ID	Security and Access Requirements	Scope
SR-022	<i>(intentionally blank)</i>	
SR-023	The solution will enable State-approved users to publish reports and share data query results with user authorized users.	DAR
SR-024	The solution will provide security access for each environment to specifically approved users and their defined profile.	All Bidders
SR-025	The solution will provide and maintain a comprehensive data security system and processes, as approved by the State and meeting the CMS, Federal, and State security requirements, to control/monitor data access, update rights, and maintain change history.	All Bidders
SR-026	The solution will enable direct user access and external system access to the MDW service layers in accordance with State security policies.	All Bidders
SR-027	The solution will maintain metadata related to security policies and procedures (e.g., user and system profiles, roles, and privileges).	All Bidders
SR-028	The solution will include user access provisioning, detailed audit tracking of all user activities, and security management for all State-approved users.	All Bidders
SR-029	The Bidder will work with the State to establish roles and permissions for all users and environments.	All Bidders
SR-030	The solution will employ an integrated security approach to provide role-based access, with single sign on functionality, across all components within the MDWAS.	All Bidders
SR-031	The solution will enable future integration with an integrated enterprise-wide single and/or same sign on solution.	All Bidders
SR-032	The solution must support the ability to provide security audit reports listing the specific users by each environment and their access controls within the environment.	All Bidders
SR-033	The MDWAS security and access solution must support the ability to apply user security at the business domain and individual report level.	All Bidders

2.7.5. Data Protection Strategies

Encompasses the comprehensive framework and access protection and security capabilities across all levels of the system (inclusive of platform, database, tools, reporting/reporting access channel, extraction, and analytics) that work together to provide comprehensive data protection.

Table 27: Data Protection Strategies Requirements

REQ ID	Data Protection Strategies Requirements	Scope
SR-034	(intentionally blank)	
SR-035	The solution will enable State-approved users to publish to and share data queries and reports with authorized stakeholders through the reporting library.	DAR
SR-036	(intentionally blank)	

2.7.6. Enterprise Data Integration

Establishes the standards for integration and interoperability with the State’s MES, encompassing both integration and interoperability with other modules, as well as with external data sources. The proposed integration solution must be capable of continuously adapting as integration standards evolve at both the State and Federal levels. As modularization within the MES continues, the Bidder should provide an approach that evolves, matures, and adapts in alignment with all modules and industry standards. The awarded Bidder must provide a solution that leverages and utilizes the preferred State integration platform or other methodologies for the acquisition and distribution of data from other, non-MES systems. Additionally, the State expects that the Bidder must provide an innovative approach, leverageable across the life of the contract, that would identify data changes over time and present the impact analysis of those changes.

Table 28: Enterprise Data Integration Requirements

REQ ID	Enterprise Data Integration Requirements	Scope
SR-037	The solution will provide integrations between modular components. The integrations should utilize the COTS tool integration features whenever possible for connecting with a database, interfacing with other COTS tools, or providing data exchange extensibility through an ESB. These integrations should enable the business users to seamlessly work within the MDWAS environment and toolset without having to know technical exchanges between the tools.	All Bidders
SR-038	The solution will allow storage, transfer, and access for all incoming and outgoing data exchanges through a variety of secure methods.	All Bidders
SR-039	(intentionally blank)	
SR-040	The solution will include a State-approved process for integrating new or updated approved data sources to the MDWAS on an ongoing basis.	MDL
SR-041	(intentionally blank)	
SR-042	The solution will support generation and ongoing optimization of both existing and any new outgoing extracts and data exchanges, as directed by the State.	MDL
SR-043	The solution will integrate data from external systems, publicly available data, and non-public data to support reporting and analytics.	MDL

2.7.6.1.1. Monitoring

Encompasses the ongoing oversight of query and reporting performance response time.

Table 29: Monitoring Requirements

REQ ID	Monitoring Requirements	Scope
SR-044	The solution will include ongoing performance monitoring and remediation. The monitoring must include the scheduled measuring and communicating query/report response time based on an agreed upon list of representative MDWAS functions.	DAR
SR-045	The solution will include ongoing performance monitoring and remediation. The monitoring must include the scheduled measuring and communicating enterprise data load time based on an agreed upon list of representative MDWAS functions.	MDL
SR-046	<i>(intentionally blank)</i>	
SR-047	The solution will include both a mechanism to communicate performance deficiencies and/or optimization opportunities to the State and a process for implementing approved changes as part of maintenance activities.	All Bidders
SR-048	The solution will provide and enable the administrative functions for cataloging and monitoring all jobs and queries and provide the ability to take control of, terminate, or remediate jobs/queries when necessary.	All Bidders
SR-049	The solution will include ongoing analysis of the databases and their infrastructures to optimize performance.	All Bidders
SR-050	The solution will include system maintenance during State-approved maintenance windows.	All Bidders

2.7.6.2. Extract Transform and Load (ETL)

The solution must encompass the mechanisms and tools to perform the extraction, cleansing, transformation, and ingestion of disparate data across multiple systems and repositories on both an initial and ongoing/incremental basis over the life of the Contract. The State expects the Bidder to provide a solution that ensures data accuracy and inclusiveness is retained during the ingestion processes. Additionally, the Bidder must provide a robust ETL mechanism that will facilitate the absorption of evolutionary changes to the source systems and/or to modify the logic to be applied during ingestion. The proposed solution will also be required to provide a user-friendly tool that will manage source-to-target mapping and encompass a collaborative business component that will engage State stakeholders to keep them informed concerning ETL work, ingestion, and source-to-target mapping.

Table 30: ETL Requirements

REQ ID	Extract Transform and Load Requirements	Scope
SR-051	The solution will provide the ability to extract, transform, and load (ETL) data through an MDW Interface into the System.	MDL
SR-052	The solution will enable integration of data from State-approved sources into the MDW at various refresh frequencies, including daily, as dictated by program needs.	MDL
SR-053	The solution will enable invocation of the data ETL functionality for all data flowing through a State-approved MDWAS interface, data exchange, or other process for obtaining external data.	MDL
SR-054	The solution will enable integration of data from State-approved sources into the MDW at various refresh frequencies, including daily, as dictated by program needs.	MDL
SR-055	The solution will provide a collaborative data quality process to assist the State with the identification of, and provide the functionality for preventing, new errors entering the system.	All Bidders
SR-056	The Bidder is to maintain and publish source-to-target mappings, which will be included in the initial deliverable and maintained through the life of the contract.	All Bidders

REQ ID	Extract Transform and Load Requirements	Scope
SR-057	The ETL must be able to perform data augmentation functions resulting in new elements that can be utilized for filtering and rollup reporting.	DAR
SR-058	The solution must accommodate source changes over the life of the contract to align with future modularization/procurement initiatives.	All
SR-059	The Bidder will be expected to integrate with the State's enterprise integration services for the ingestion of data into and export of data from the MDWAS solution.	MDL

2.7.7. Audit Controls

The solution must include comprehensive mechanisms to control, monitor, and report against the data refreshes to ensure successful and accurate ingestion and storage of the source data.

Table 31: Audit Controls Requirements

REQ ID	Audit Controls Requirements	Scope
SR-060	The Bidder must provide audit balance control reporting against the data ingestion and load processes to validate the accuracy of data updates during initial data loading and ongoing operations.	All Bidders
SR-061	The Bidder must address imbalances in the audit balance report by performing root cause analysis and presenting the results to the State, along with a remediation plan.	All Bidders
SR-062	The Bidder must escalate MDWAS data update issues to the State within four (4) hours of identification of the issue.	All Bidders

2.7.7.1. Query and Data Semantic Tools

The solution must include the environment and the tools to enable all authorized users to perform queries directly against the warehouse data and render the data for extraction, reporting, or further analysis in the user-defined and actionable format. The Bidder is expected to provide robust query and data semantic tools and capabilities that enable a standard/typical business user to engage successfully and meaningfully with the data.

Table 32: Query and Data Semantic Tools Requirements

REQ ID	Query and Data Semantic Tools Requirements	Scope
SR-063	The solution will provide tools for creating and deploying complex queries.	DAR
SR-064	The solution will provide tools (e.g., natural language processing) for identifying, extracting, decomposing, and formatting word patterns and phrases within free-form text (e.g., clinical, and other notes).	DAR
SR-065	The solution will provide tools that enable direct State-approved user access to scheduled queries.	DAR
SR-066	The solution will provide the capability to schedule queries and report delivery based on user and/or State specifications.	DAR
SR-067	The solution will allow the data and reports to be rendered and/or exported in a variety of formats.	DAR
SR-068	<i>(intentionally blank)</i>	
SR-069	<i>(intentionally blank)</i>	
SR-070	<i>(intentionally blank)</i>	
SR-071	<i>(intentionally blank)</i>	
SR-072	The solution will allow provisioned users to save reports and queries created in the Sandbox environment to the report library so outputs/results may be shared with non-Sandbox users.	DAR
SR-073	<i>(intentionally blank)</i>	

2.7.8.MDL and DAR Performance Requirements

The Bidder must implement a strategy for monitoring and managing the MDWAS to ensure that it is consistently performing at, or exceeding, State-approved service levels. Their approach must accommodate the expected overall system health and performance not only at implementation but throughout the life of the contract including during periods of growth, capacity-driven upward scaling, and new data source integration. The strategy is expected to include both the requisite technological management and the appropriate staffing to identify, assess, and capitalize on any opportunities for improving system performance.

Table 33: MDW Performance Requirements

REQ ID	Medicaid Data Warehouse Performance Requirements	Scope
SR-074	The solution will adhere to best practices for scalability, performance, and optimization in support of all current and future State needs.	All Bidders
SR-075	The solution will include, for State approval, benchmarks and standards covering all performance aspects of the implemented solution's performance and service levels.	All Bidders
SR-076	The solution will meet or exceed all jointly negotiated and State-approved performance and service level benchmarks and standards.	All Bidders
SR-077	The solution will provide reasonable, mutually agreed upon query response and load times for data return and page load.	DAR
SR-078	The solution will provide reasonable, mutually agreed upon query response and load times for data return and report generation.	DAR
SR-079	The Bidder will report on a specific set of performance measures and benchmarks at a frequency mutually agreed to with the State.	All Bidders

2.7.9.Data Management Requirements

The MDWAS Bidder must implement a comprehensive strategy to address data management within State systems and data repositories. This solution must encompass data engagement, governance, integration, definition, and protection. The State recognizes that the foundation of any successful data management strategy must be a robust mechanism to gather, link, align, cleanse, normalize, standardize, organize, integrate, consolidate, and transform data from multiple diverse and disparate data sources. Data sources in scope are listed in Section 1.1.1.1. The State expects the Bidder to provide modern methods for data management via tools and processes that encompass metadata, data aggregation, data dictionaries, data lineage, data storage, retention, and access. Included under Data Management are the following sub-categories of solution capabilities that should be addressed:

2.7.9.1. Master Data Management

The solution must encompass the establishment of processes and structures within the MDW to enforce and ensure data uniformity, accuracy, stewardship, semantic consistency, and accountability across all State data sources. Additionally, the Bidder must propose a solution for instances in which disparate, External Data Files are to be imported into the Sandbox environment for further analysis. These measures will enable the State to reduce data redundancy and provide users with enhanced capabilities when performing querying and reporting activities. Describe the tools and/or processes that will be employed to detect and address data duplication, accurately maintain referential integrity, and account for data linkage scenarios such as the management of original claims and follow-on adjustments.

Table 34: Master Data Management Requirements

REQ ID	Master Data Management Requirements	Scope
SR-080	<i>(intentionally blank)</i>	
SR-081	<i>(intentionally blank)</i>	
SR-082	<i>(intentionally blank)</i>	

REQ ID	Master Data Management Requirements	Scope
SR-083	<i>(intentionally blank)</i>	
SR-084	The solution will include functionality to develop, implement, and maintain multi-dimensional data objects for derived and aggregated data.	DAR
SR-085	The solution will enable the maintenance, tracking, and identification of source data values for the Enterprise.	All Bidders
SR-086	<i>(intentionally blank)</i>	
SR-087	The solution will encompass the ongoing transformation, relational definition, and approach to data linking and aggregation for all designated data, per the State-approved conversion plan.	MDL
SR-088	The Bidder will implement and maintain all requisite data migration tools and utilities.	All Bidders
SR-089	The solution will provide crosswalk(s) for all data that is changed or moved during migration, including identifying/documenting all non-converted data and where it resides.	All Bidders

2.7.9.2. Metadata

The solution should include the establishment and maintenance of all metadata capabilities through processes and tools, including the distribution of metadata to a central metadata repository within the SoV. Additionally, it will be critical that the Bidder provides State business users with documentation and training addressing how the metadata can be utilized to help business users evaluate and select necessary data attributes to generate accurate and relevant reports. Describe what metadata will be maintained including how this data will be stored and surfaced to the business users within the solution. Describe how the delivery mechanism will enable the business user to make active use of the information maintained in the metadata repository.

Table 35: Metadata Requirements

REQ ID	Metadata Requirements	Scope
SR-090	The solution will have the ability to show metadata change history.	All Bidders
SR-091	The solution will provide metadata to a central online metadata dictionary and repository managed by the State.	All Bidders
SR-092	The solution will include an online metadata dictionary and repository accessible to a broad range of users and featuring advanced, customizable, and complex search capabilities including hyperlink referencing.	MDL
SR-093	The solution will provide the ability to view, maintain, and report on all aspects of the metadata across all data in the data store for that solution.	All Bidders
SR-094	The solution will include providing necessary metadata to a central repository to document traceability and data lineage that will be accessible online to a broad range of users.	All Bidders
SR-095	The solution will include tools and methods to document traceability and data lineage and will be accessible online to a broad range of users.	MDL
SR-096	The solution will include a process that will provide feedback mechanisms to improve metadata quality.	All Bidders
SR-097	The solution must provide the capability to upload and maintain a business glossary that will be accessible online to a broad range of users.	MDL
SR-098	The solution will include the capability to link technical metadata to the corresponding terms in the business glossary and associate business policies to items in the business glossary.	MDL

REQ ID	Metadata Requirements	Scope
SR-099	The solution must include the capability to affix data classifications to individual metadata items.	MDL
SR-100	The solution must enable loading data quality metrics and reporting against those metrics from within the metadata layer.	All Bidders
SR-101	The solution will provide a structure that will enable the analysis of data through analytical tool(s).	All Bidders
SR-102	<i>(intentionally blank)</i>	
SR-103	<i>(intentionally blank)</i>	
SR-104	The solution will support a collaboratively developed, State-approved. process to manage all data requests.	All Bidders
SR-105	The solution will provide administrative processes and functions for the deletion and clean-up of datasets.	All Bidders
SR-106	The solution will support multi-dimensional reporting capabilities against the data in the MDW.	DAR
SR-107	The solution will include data quality tools and review capabilities.	All Bidders
SR-108	The solution will allow the use of SQL for the retrieval and extraction of information from the datastore(s) using a variety of tools.	All Bidders
SR-109	The solution will provide data management tools that offer API functionality to facilitate interoperability, data extracts, and business-centric data processing.	All Bidders
SR-110	The solution must offer the capability to push systematic notifications to specified users.	DAR
SR-111	The solution will include SQL tools and Open Database Connectivity (ODBC)/ Java Database Connectivity (JDBC) connectivity. The Bidder may propose other open standard application programming interfaces for accessing database functionality for use by all State-approved users in addition to ODBC/JDBC.	All Bidders

2.7.9.3. Environments, Structures, and Processes

The solution should include the establishment of physical data structures and business processes to enable the fulfillment of all data management requirements. This framework provides the foundation upon which all data management activities can be built and must support point-in-time reporting as well as focused reporting/analysis against data subsets. Describe the data optimization strategies that will be utilized in the solution. Describe how the proposed system will accommodate expansion needs as data volumes increase over time including maintaining both data storage and performance.

Table 36: Environments, Structures, and Processes Requirements

REQ ID	Environments, Structures, and Processes Requirements	Scope
SR-112	The solution will provide the necessary Data Management structure to support the evolving data and reporting needs of the organization.	All Bidders
SR-113	The solution will provide data optimization for efficient query execution.	DAR
SR-114	The solution will implement, maintain, and support Data Management best practices and industry standards, as defined and approved by the State in DEL – 11, Data Management Strategy .	All Bidders
SR-115	The solution will provide and enable the administrative functions for cataloging and monitoring all jobs or queries and provide the ability to take control, terminate, or remediate jobs/queries when necessary.	All Bidders

2.8. Data Analytics and Reporting (DAR) System

The DAR Bidder will propose a solution that implements the reporting and analytic tools and the necessary reporting and analytic architecture to provide accurate data reporting, querying, and interactive visualization capabilities. Dashboards and scorecards, as well as a variety of advanced analytics, should also be a part of any proposed solution. This must be built in such a way as to satisfy State/Federally required reporting requirements. The business and technical processes of the proposed solution must ensure that all existing State-approved reporting and analytics services are replaced and that the replacement reports are maintained, and fully supported over the life of the contract. The Bidder should implement a collection of industry-leading analytic toolsets that are accessible to and useable by the appropriate set of end users. The DAR solution can be proposed as a standalone module/toolset, in accordance with CMS Conditions and Standards and definition for modularity; however, it must integrate with the ADW. The data analytics and reporting system must accommodate the following user types:

- a) **Advanced/Power Users** Will be provided connectivity to the Sandbox area within the ADW to explore the data in more detail and will have increased capability to work with data than would a casual or business user. Typical activities would include developing complex queries and analytics executed against the Sandbox data using analytic reporting tools or directly with a structured query language.
- b) **Business Users** Will require access to analytic reporting tools with a high degree of configurability to perform simple and moderate queries to achieve desired results.
- c) **Report Consumer** Will execute predefined and prompted reports using point and click technology.
- d) **Executive Users** Will use analytic reporting tools to execute basic canned queries and canned reports via dashboards and scorecards.

It is expected that the Bidder will provide to the State, upon proposal submittal and to be updated on an annual basis, a consolidated, cross-referenced list (by user type) of the tools included in the DAS solution. Included under Data Analytics and Reporting are the following sub-categories of technology-based solution capabilities that should be addressed:

2.8.1. Reporting Tools and Capabilities

The DAS Bidder solution should include a comprehensive suite of tools that will enable complex querying, report generation, data visualization capabilities, and dashboarding.

Table 37: Reporting Tools and Capabilities Requirements

REQ ID	Reporting Tools and Capabilities Requirements	Scope
SR-116	The solution will provide the business intelligence functionality necessary to manage and evaluate State Enterprise data, programs, and strategies via a collection of graphical user interface (GUI) tools.	DAR
SR-117	The solution will include the tools and data presentation methods that support and enable data querying and reporting capabilities for a wide variety of users characterized by different user types and levels of experience.	DAR
SR-118	The solution will provide access to State-authorized users to allow flexibility in viewing and/or connecting to data sources within the MDWAS solution.	All Bidders
SR-119	The solution will include the tools and methods that support and enable authorized users to access data through user-created ad hoc reporting.	DAR
SR-120	The Bidder's proposed solution will include the tools and methods that support and enable authorized data scientists to access data in the Data Lake.	MDL
SR-121	The solution will include the tools and methods that support and enable users to build/develop, name, edit/modify, and save multiple user-created queries, searches, and sort specifications.	DAR

REQ ID	Reporting Tools and Capabilities Requirements	Scope
SR-122	The solution will include the tools and methods that support and enable users to add narratives or supporting documentation in individual queries.	DAR
SR-123	The solution will include the tools and methods that support the saving and versioning of reporting and analytics artifacts.	DAR
SR-124	The solution will include the tools and methods that support and enable user-configured, interactive dashboard solutions that do not require programming by the end user at run-time.	DAR
SR-125	The solution will include the tools and methods that support and enable the presentation of multiple interactive data visualizations into a single report presentation (e.g., tabular, geospatial, and graphical depictions of the result sets).	DAR
SR-126	The solution will include the tools and methods that support and enable the creation and display of legends and documentary text on all reports and maps.	DAR
SR-127	The solution will include the tools and methods that support and enable the production of summary-level reports, with detail drilldown capabilities, for all supported visualizations and in view-ready and print-ready formats.	DAR
SR-128	The solution will include the tools and methods that support and enable exploration and data presentation in a variety of ways and without the need to export the data off the MDWAS platform.	DAR
SR-129	The solution will include the tools and methods that support and enable the capability to manually modify reports and save previous versions prior to performing changes.	DAR
SR-130	The solution will include the tools and methods that support and enable all users to export data in a variety of user-selected, standard file formats.	DAR
SR-131	<i>(intentionally blank)</i>	
SR-132	The solution will include prompted reports and support and enable authorized users to execute such reports on demand.	DAR

2.8.2. Analytic Tools and Capabilities

The DAS Bidder’s solution should provide a comprehensive suite of tools to support operational management and strategic decision making across the enterprise. The suite of tools should support online analysis within the host environment (i.e., moving away from siloed analysis practices). Additionally, the scope of analysis functionality provided by the proposed reporting tools should include statistical studies, member risk stratification, clinical stratification, member predictive analysis, sampling, extrapolation, trending, and geospatial reporting and analysis. Finally, the Bidder must provide a list of the query, reporting, and analytics tools that comprise the DAS solution, document any licensing limitations, and devise a strategy toward supplying the requisite analytic workspaces and platforms and supporting a State-internal team of power users working on those platforms. It is expected that the Bidder’s proposed solution can incorporate statistical tools and advanced healthcare analytic groupers, along with providing robust support and education for State users for the appropriate utilization of these components.

Table 38: Analytic Tools and Capabilities Requirements

REQ ID	Analytic Tools and Capabilities Requirements	Scope
SR-133	The Bidder’s proposed solution will provide proven, accurate, high-quality capabilities and tools for reporting, data assembly, and analytics.	DAR
SR-134	The Bidder’s proposed solution will include the tools and methods that support and enable random data sampling.	DAR
SR-135	The Bidder’s proposed solution will include the tools and methods that support and enable predictive modeling and forecasting.	DAR

REQ ID	Analytic Tools and Capabilities Requirements	Scope
SR-136	The Bidder's proposed solution will include the tools and methods that support and enable a proven methodology to classify and evaluate statistical profiles for utilization pattern detection.	DAR
SR-137	The Bidder's proposed solution will include the tools and methods that support and enable the application of risk score and episode analysis, (e.g., Adjusted Clinical Groups (ACG), Episode Treatment Group (ETG), Episode Risk Group (ERG) to specific datasets.	DAR
SR-138	The Bidder's proposed solution will include the ability to perform member population clinical and disease stratification based on claims history analysis.	DAR
SR-139	The Bidder's proposed solution will include the tools and methods that support and enable data mining capabilities.	DAR
SR-140	The Bidder's proposed solution will include the tools and methods that support and enable the capability to perform root cause, iterative, and risk-based analysis.	All Bidders
SR-141	The Bidder's proposed solution will include the tools and methods that support and enable geographic data analysis.	DAR
SR-142	The Bidder's proposed solution will provide the functionality to utilize all data, queries, analysis, and reporting to produce Geospatial Analytics and maps.	DAR
SR-143	The Bidder's proposed solution will provide the functionality to produce custom layered maps in which the layers can contain labeling, markings, colors, and legends.	DAR
SR-144	The Bidder's proposed solution will maintain geocoding for all location-specific data.	DAR
SR-145	The Bidder's proposed solution will provide the functionality to generate and export maps and geospatial reports.	DAR
SR-146	The Bidder's proposed solution will provide the functionality to view multiple map layers and to remove layers as needed.	DAR
SR-147	The Bidder's proposed solution will provide the functionality to forecast (e.g., make estimations based on time series, cross-sectional, and longitudinal data; perform simple linear regression; perform least squares regression; perform double exponential smoothing). This capability includes the ability to indicate the degree of uncertainty associated with forecasts.	DAR
SR-148	The Bidder's proposed solution will provide the functionality to develop and conduct statistical analysis (e.g., calculate or perform averages, standard deviations, confidence intervals, correlations, aggregations, summary statistics, actuarially sound rate setting, controlled comparisons, regressions, incurred but not reported (IBNR) calculations, development of statistical models, probability, probabilistic sensitivity analysis, predictive analytics, survey weighting and analysis).	DAR
SR-149	The Bidder's proposed solution will provide the functionality to perform statistical analysis on geospatial data.	DAR
SR-150	The Bidder's proposed solution will provide web-based access through which users will access applicable reporting and analytics tools.	DAR
SR-151	The Bidder's proposed solution will ensure their web-based tools are compatible with industry standard internet browsers, as mutually agreed upon by the Bidder and the State and allows for complete use of all features.	DAR
SR-152	The Bidder's proposed solution will include the tools and methods that support and enable ongoing query, report, and analytics optimization.	DAR
SR-153	The Bidder's proposed solution will include the tools and methods that support and enable the generation of reports in batch, on-demand, and scheduled modes.	DAR

REQ ID	Analytic Tools and Capabilities Requirements	Scope
SR-154	The Bidder's proposed solution will include the tools and methods that support and enable users to terminate user-initiated queries at any point during the active query process.	DAR
SR-155	The Bidder's proposed solution will include the tools and methods that support and enable notification and alert delivery to inform users of the availability of reports or data.	DAR
SR-156	The Bidder's proposed solution will include the tools and methods that support and enable configurable monitoring and notification functionality.	All Bidders
SR-157	The Bidder's proposed solution will include capabilities to continually monitor system utilization for resource contentions, high traffic volumes, and slowed response times, and to proactively adjust ensure connectivity and database availability.	All Bidders
SR-158	The Bidder's proposed solution will include the tools and methods to audit all activities, reports, and analytics (by user ID, activity, time frame, and by report) and provide authorized users access to this information.	All Bidders
SR-159	The Bidder's proposed solution will include the tools and methods that support and enable a centralized repository/library in which to store, share, search, and exchange reports, templates, queries, imported data, and analytics.	DAR
SR-160	The Bidder's proposed solution will include the tools and methods that support and enable users to develop, save, and publish templates (e.g., table/reporting) that can be applied to query results.	DAR
SR-161	The Bidder's proposed solution will include the tools and methods that support and enable a comprehensive content and document management approach with defined processes for all reports and queries.	DAR

2.8.3.State and Federal Reporting

A significant portion of the Bidder's solution will be devoted to the creation of predefined, State-specific reports that address State and Federal reporting business requirements. The necessary reporting presentations can take on various styles inclusive of, but not limited to, predefined/canned/fixed reporting, user-prompted reporting, and interactive dashboards, graphical visualizations, and geospatial presentations. SoV has identified in the Bidders' library and in the RFP requirements, reports that must be included in the new solution. However, the expectation is that the Bidder will enhance and modernize these existing reports to increase their value capitalizing on enriched content and/or more current and engaging presentation methods. The reporting and querying requirements elicited from the business users are driven by the State's need to evaluate and manage the programs and their dependence on both singular programmatic operational performance metrics and enterprise-wide, multi-program, operational performance metrics. The breadth of analysis and reporting manifested in the body of reports in the Bidders' library reflects State leadership's efforts to benchmark its progress towards achieving their overall policy and business objectives.

For each of the reporting categories below, SoV has included representative reporting use cases. The Bidder, in responding to the detailed requirements for each category, should explain how their solution fulfills the associated business use cases. These use cases do not represent a comprehensive list for each category, rather, they frame the requirements and enable the Bidder to explain how their reporting and analysis capabilities enable the state users to support the business.

2.8.3.1. General State and Federal Reporting Requirements

Table 39: General Requirements for State and Federal Reporting

REQ ID	General State and Federal Reporting Requirements	Scope
SR-162	The Bidder will maintain a documented, State-approved, quality approach integrated into the Quality Management Plan Deliverable that ensures	DAR

REQ ID	General State and Federal Reporting Requirements	Scope
	reporting/query and analytic results are accurate and consistent representations of the source data.	
SR-163	The Bidder will follow a documented, State-approved, report accuracy and validation review strategy that is integrated into the Quality Management Plan Deliverable which, itself, is to be updated and presented on a quarterly basis or as requested by the State.	DAR
SR-164	The Bidder will follow a documented, State-approved, report usage and access review strategy that is integrated into the Quality Management Plan Deliverable which, itself, is to be updated and presented on a quarterly basis or as requested by the State.	DAR
SR-165	The Bidder will identify data source change/evolution impacts to all existing MDWAS components and capabilities in accordance with the approved Change Management Plan.	All Bidders
SR-166	The Bidder will maintain adequate Operational Services staff to work collaboratively with the State on all service requests and to perform all operational functions.	All Bidders
SR-167	The Bidder will support the State in all reporting and analysis activities that utilize the proposed tools, techniques, and staffing.	DAR
SR-168	The Bidder must plan for and allocate experienced, full-time general/reporting personnel that are dedicated to the State account to meet all reporting and analytics needs as defined under Section 2.8 of this RFP. Additionally, any hired and/or assigned reporting staff must comply and be in accordance with all Bidder Staffing provisions and requirements laid out in RFP Section 2.4 – Bidder Staffing.	DAR
SR-169	The full-time, dedicated support staff are expected to be co-located at State facilities with the State staff.	DAR
SR-170	The Bidder must submit, as part of the cost proposal, an operational support rate card for the positions allocated in their bid.	DAR
SR-171	The Bidder will provide the necessary operational support, mechanisms, and expertise/staff to address all aspects of the reporting and analytics tools proposed by the Bidder.	DAR
SR-172	The Bidder will allocate staff who possess knowledge of MMIS inclusive of utilization of reference data for reporting purposes.	DAR
SR-173	The Bidder will provide their allocated staff the necessary training and support to become knowledgeable in the State's programs and data.	All Bidders
SR-174	The Bidder will work collaboratively with the State to explain, support, and defend reporting and analytics results to external and internal MES Stakeholders, auditors, or other parties, when necessary, as requested by the State.	DAR
SR-175	The Bidder will accommodate the need for the State to request, as necessary, additional outreach services for the development of outreach materials and direct interaction with MES Stakeholders.	DAR
SR-176	The Bidder will deliver all reporting and analytical requests on a State-approved schedule.	DAR
SR-177	The Bidder will provide the capability to de-identify data if any reports contain sensitive information that needs to be shared with MES Stakeholders to comply with all applicable HIPAA privacy rules.	DAR
SR-178	The Bidder will provide operational analytical/reporting support and expertise pertaining to the production of both one-time and ongoing data extracts as requested by the State.	DAR
SR-179	The Bidder will provide operational analytical/reporting support and expertise pertaining to report data validation for reports produced from the Medicaid Data Warehouse (MDW).	DAR

REQ ID	General State and Federal Reporting Requirements	Scope
SR-180	The Bidder will provide the operational analytical support of ongoing reporting including predictive and reactive analytics of financial, clinical, and program data.	DAR
SR-181	The Bidder will provide analytical support for ad hoc reporting including exploratory, interpretive, and data mining analytical reporting.	DAR
SR-182	The Bidder will allocate staff with the capability to develop and maintain dashboards.	DAR
SR-183	The Bidder will monitor and inform the State of potential Federal, State, or industry changes that may have an impact on business processes or on systems covered by the Contract.	All Bidders
SR-184	The Bidder will develop a State-approved strategy to provide actionable recommendations for changes to reporting and analytics activities on a reoccurring basis.	DAR
SR-185	The Bidder will provide support for impact analysis and reporting.	All Bidders
SR-186	The Bidder will propose, implement, and maintain a suite of State-approved high-level and/or general-level reports within and across State populations to fulfill the MES information system needs.	DAR
SR-187	The Bidder will provide operational analytical/reporting support and expertise in formulating a State-approved response to open records requests.	DAR
SR-188	The Bidder will obtain a 90% or higher operational satisfaction score to be measured via an annual State-approved user survey.	All Bidders

2.8.3.2. Reporting Library Repository

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 40: Representative Reporting Library Repository User Stories

User Type	Persona	Function	Business Case/User Story
Report Consumer	Healthcare Analyst	Program Support	As a Healthcare Analyst, I must be able to quickly recall reports from a central reporting library to maximize the reuse of commonly used reports. The reporting library should be available through a browser and should be easy to navigate, for example, by presenting report categories which are linked directly to the reports within each category.
Report Consumer	Healthcare Analyst	Program Support	As a Healthcare Analyst, I must be able to review an inventory of predefined reports and view an audit trail identifying the last time each report was refreshed.

Table 41: Reporting Library Repository Requirements

REQ ID	Reporting Library Repository Requirements	Scope
SR-189	The solution should provide the functionality to search a repository of vetted reports, both standard and ad hoc, that can be viewed and executed.	DAR
SR-190	The solution should account for report level-based security so that only approved and authorized users can execute authorized reports and see only authorized content.	DAR
SR-191	The solution must have all associated report business details and metadata, defined for each individual report, so that the State can ascertain the intended business usage of the report.	DAR

REQ ID	Reporting Library Repository Requirements	Scope
SR-192	The solution must include the capability to facilitate user-to-user messaging within the construct of the report library/repository solution.	DAR
SR-193	The Bidder will convert or replicate all identified reports and queries, including those identified during discovery, from the existing reporting and analytics solutions and provide user training prior to Operations Go-Live. Bidder's may reference the Procurement Library to see a representative listing of current reports and queries.	DAR

2.8.3.3. Medicaid Financial Management Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 42: Representative Reporting - Financial Management User Stories

User Type	Persona	Function	Business Case/User Story
Report Consumer	Medicaid Financial Analyst: As a Financial Analyst my role is to monitor the benefit expenditures in relation to the budget forecast.	Financial budget to actual monitoring	The analysis includes being able to navigate the categories of service and the associated funding codes and to be able to do so at the statewide and county levels. The results of my efforts are to explain at the Category of Service (COS)/Fund Code/Geospatial location differences in the budget to actual benefit expenditures.
Report and File Creator	Business Analyst: As a business analyst I often must create ad hoc queries to address Legislature or New Paper inquiries to the program.	Addressing unique questions about the program.	As a business analyst I often must create ad hoc queries to address Legislature or Newspaper inquiries to the program. I listen to the request and interpret the question into the specifics of the data to pull, filter and summarize from the MDW. The result is often a published pdf of a report I created showing the net results or the publication of an extracted file that is provided to the third party. The questions vary from a specific geographic area to a specific subset of recipients to the benefit expenditures for a set of services.
Report Consumer	Medicaid Financial Analyst: As a Financial Analyst my role is to validate and research weekly provider payments.	Provider Payment Management	As a Financial Analyst I review the claims payment information on a weekly basis as part of addressing questions regarding provider payments. The report is organized by Provider Type and includes the procedure codes and the amounts paid.

Table 43: Medicaid Financial Reporting Requirements

REQ ID	Medicaid Financial Management Reporting Requirements	Scope
SR-194	The Bidder must create the full set of identified standard Medicaid Financial Management reports as listed and identified in - MDWAS Standard Reports and use cases located in the MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR
SR-195	The Bidder will provide operational analytical/reporting support for pricing and reimbursement/rate setting, administrative rates, and service rates.	DAR

SR-196	The Bidder will provide operational analytical/reporting support and expertise for budget and expenditure analysis/projections, forecasts, and cost/benefit analysis.	DAR
SR-197	The Bidder will provide operational analytical/reporting support and expertise in the analysis/comparison of data across State programs (e.g., cost, service utilization, quality, population).	DAR

2.8.3.4. Provider/Member Enrollment and Management Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 44: Representative Reporting - Provider/Member Enrollment and Management User Stories

User Type	Persona	Function	Business Case/User Story
Report and File Creator	Healthcare Analyst	Program Support	As a Healthcare Analyst I must research discrepancies between the state eligibility system and the MMIS member enrollment data. This requires the ability to create ad hoc reports in search of specific records sourced from the two data sources.
Report Consumer	Provider Enrollment Supervisor: As the Provider Enrollment Supervisor I monitor the throughput of the provider enrollment applications.	Provider Enrollment Management	I review and provide summary reports by Provider Type, Specialty, and county. Additionally, I monitor the enrollment staff inventory counts as a measurement of the team's effectiveness.

Table 45: Provider/Member Enrollment and Management Reporting

REQ ID	Provider/Member Enrollment and Management Reporting Requirements	Scope
SR-198	The Bidder must create the full set of identified standard Provider/Member Enrollment and Management reports as listed and identified - MDWAS Standard Reports and use cases located in the MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR

2.8.3.5. Claims Management Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 46: Representative Reporting - Claims Management User Stories

User Type	Persona	Function	Business Case/User Story
Report Consumer	Claims Operations Manager: As the Operations Manager of the Claims business area my role is to monitor and report on the daily and weekly claim throughput metrics.	Claims Management	As a Claims Operations Manager we must monitor the claims suspense metrics and evaluate if a subset of claim types is trending outside of standard processing count trends.
Report Consumer	Claims Operations Manager: As the Operations Manager of the Claims business area my role is to monitor and report on the daily and weekly claim throughput metrics.	Claims Management	The monitoring of the claim inventory includes a review of the metrics by claim type, media, and the disposition of the claim. The data should be presented in both visual trend lines as well as detailed counts.

Table 47: Claims Management Reporting Requirements

REQ ID	Claims Management Reporting Requirements	Scope
SR-199	The Bidder must create the full set of identified standard Claims Management reports as listed and identified - MDWAS Standard Reports and use cases located in the Procurement Library: MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR
SR-200	The Bidder will provide operational analytical/reporting support and expertise pertaining to medical billing against program policies.	DAR

2.8.3.6. Utilization Management Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 48: Representative Reporting - Utilization Management User Stories

User Type	Persona	Function	Business Case/User Story
Report Creator and Consumer	Healthcare Care Management Analyst	Member risk assessment	As a Healthcare Care Management Analyst, I utilize outputs from clinical groupers that perform clinical and disease classifications of members, as well as the create ad hoc reports specific to a stratification of the population or details to an individual as a means of identifying incidences of care that would benefit from intervention.
Report and File Creator and Consumer	Medicaid Program Analyst: Perform Utilization Review	Utilization Management	The utilization review analysis involves the review of predefined reports as well as the generation of specific results related to portions of the population and the services they have received. The analysis could be for overall services received, specific clinical categories of the population and/or the

User Type	Persona	Function	Business Case/User Story
			focus on specific programs and associated services.

Table 49: Utilization Management Reporting Requirements

REQ ID	Utilization Management Reporting Requirements	Scope
SR-201	The Bidder's solution must provide reporting on the frequency of diagnosis code usage (top 10, top 50)	DAR
SR-202	The Bidder's solution must provide reporting on the frequency of procedure code usage (top 10, top 50)	DAR
SR-203	The Bidder's solution must provide the ability to identify members within specific clinical stratifications.	DAR
SR-204	The Bidder's solution must provide the ability to identify trends in healthcare service utilization over time.	DAR
SR-205	The Bidder's solution must provide the ability to perform geospatial analysis of the healthcare services provided to the members.	DAR
SR-206	The Bidder's solution must provide the ability to identify potential avoidable hospitalizations.	DAR

2.8.3.7. Federal Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 50: Representative Reporting - Federal Reporting Management User Stories

User Type	Persona	Function	Business Case/User Story
Report and File Creator	Medicaid Program Analyst: Performing Transformed Medicaid Statistical Information System (T-MSIS) research	T-MSIS Research	As a Medicaid Program Analyst, I am often required to perform analytic research on T-MSIS data which has been submitted to CMS; this request is typically in response to questions/concerns that CMS responds with post-file submission. The analysis required to satisfy CMS questions/concerns typically includes the need to free form develops ad hoc reports directly against the T-MSIS data store.

Table 51: Federal Reporting Requirements

REQ ID	Federal Reporting Requirements	Scope
SR-207	The Bidder must create the full set of identified standard Federal Management reports as listed and identified - MDWAS Standard Reports and use cases located in the Procurement library – MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR
SR-208	The Bidder will propose, implement, and maintain a solution to create, replicate, manage, and retain State-approved Federally mandated and State reports required for program and financial functions.	DAR
SR-209	The solution must produce the CMS T-MSIS files as defined by the federal standards.	DAR
SR-210	The solution must provide business user access to a T-MSIS data mart where users can directly query the last six (6) T-MSIS file submissions.	DAR
SR-211	The Bidder must create and maintain all Federally required CMS reports (e.g., CMS-64, CMS-27, CMS-21, and CMS-416).	DAR

2.8.3.8. Healthcare Quality Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 52: Representative Reporting - Health Care Quality User Stories

User Type	Persona	Function	Business Case/User Story
Power User	Healthcare Quality Analyst: Data Set Research	Healthcare Quality Measures	As a Healthcare Quality Analyst, I often need to utilize a 'one off' data set and bring that data into the MDW for use when building ad hoc reports against the claims data store. I need the ability to generate and run hand developed SQL to perform these functions.
Data Scientist	Healthcare Data Scientist:	Program Evaluation	As a Data Scientist, I will utilize the platform toolset and access to the detailed data in order to both explore the datasets for previously undiscovered realities of the program as well as establishing empirical methods for applying techniques for using the evaluated measures to shape the healthcare program (i.e., payment reform models).
Report Consumer	Healthcare Policy Analyst: Program Oversight	Healthcare Metric Review	As a Healthcare Policy Analyst, I need to review standard reports and dashboards of key healthcare program metrics such as the number of members enrolled, dollars expended by claim type and identify outliers that indicate an issue with the program that needs managed.

Table 53: Healthcare Quality Reporting Requirements

REQ ID	Healthcare Quality Reporting Requirements	Scope
SR-212	The Bidder must create the full set of identified standard Healthcare Quality Management reports per as listed and identified - MDWAS Standard Reports and use cases located in the Procurement library – MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR
SR-213	The Bidder will purchase and maintain the updated and released Healthcare Effectiveness Data and Information Set (HEDIS) measures within a reasonable timeframe of any update or release and as approved by the State.	DAR
SR-214	The Bidder will generate, monitor, and maintain reports in support of HEDIS, National Quality Forum, State/Federal Regulatory Reporting, and/or other quality measures (e.g., similar to HEDIS) based upon industry standards, State specified health outcomes, and quality measures.	DAR
SR-215	The Bidder will provide operational analytical/reporting support and expertise in designing, fielding/conducting, analyzing, and presenting the findings of MES Stakeholder surveys. The Bidder will minimally be required to conduct/field, analyze, and present the results of the annual Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey.	DAR

2.8.3.9. Management Dashboards

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 54: Representative Reporting - Management Dashboard User Stories

User Type	Persona	Function	Business Case/User Story
Executive	Agency Director	Program Oversight	As an executive, I need to be able to know summary values related to members, providers and the associated claims and benefit expenditures. This information needs to be broken out by key categorical codes such as funding code, aid category, claim type, geospatial location.
Manager	Healthcare Program Manager/Director	SLA/KPI Operational Oversight	As a Healthcare Program Manager/Director I need to monitor the key SLA/KPIs associated with managing the program.
Manager	Healthcare MMIS Operations Manager	Operational oversight and monitoring	As a Healthcare MMIS Operations Manager I need to be able to review the critical KPI measures associated with the operational aspects of running the Medicaid business. I need to be able to view and drill into dashboard style presentations that enable the visualization of historical values as well as timely (daily/during the day) updates to key measures.

Table 55: Management Dashboard Requirements

REQ ID	Management Dashboard Requirements	Scope
SR-216	The Bidder must create the full set of identified standard Medical Dashboard Management reports per as listed and identified - MDWAS Standard Reports and use cases located in the Procurement library – MDWAS Standard Reports, in addition to any reports elicited during the DDI period.	DAR
SR-217	The Bidder will propose, implement, and maintain a set of State-approved enterprise dashboards.	DAR
SR-218	The Bidder will create, and support dashboards based on State identified KPIs, as outlined in RFP Section 2.4.4 .	DAR

2.8.3.10. Pharmacy Management Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 56: Representative Reporting - Pharmacy Management User Stories

User Type	Persona	Function	Business Case/User Story
Report Consumer	Healthcare Pharmacy Program Manager	Program Oversight	As a Healthcare Pharmacy Program Manager, I must keep track of the Rx utilization trends. The data presentation must provide a visual engagement that enables drilling into the stratification of the Rx data by therapeutic class and time period.
Report Consumer	Healthcare Pharmacy Analyst	Financial Oversight	As a Healthcare Program Manager/Director I need to provide oversight on the overall Rx spending as well as the identification of aspects of Rx that are driving the expenditure trends reported month over month. The reporting needs to make stratification of the Rx claims data by Therapeutic Class and associated groupings that provide insight into the expenditure trends.

User Type	Persona	Function	Business Case/User Story
Report Creator and Consumer	Healthcare Pharmacy Analyst	Member risk assessment	As Healthcare Pharmacy Analysts, we must provide oversight of the member lock-in program to assure that members of high risk for Rx abuse are following Rx access policy.

Table 57: Pharmacy Management Reporting Requirements (TBD)

REQ ID	Pharmacy Management Reporting Requirements	Scope
SR-219	The Bidder must create the full set of identified standard Pharmacy Management reports as elicited and identified during the DDI period.	DAR
SR-220	The Bidder must develop, in collaboration with the State's Pharmacy Management Staff, a report that tracks Rx utilization trends, enabling stratification of the Rx data by therapeutic class and time period.	DAR
SR-221	The Bidder must develop, in collaboration with State Pharmacy and Financial Management staff, a report that supports the State's oversight on the overall Rx spending, with month over month trending, which also includes the stratification of Rx claims data by Therapeutic Class and associated groupings.	DAR
SR-222	The Bidder must develop, in collaboration with State Pharmacy Management staff, a report As Healthcare Pharmacy Analysts, a report that supports the State's oversight of the member lock-in program to assure that members of high risk for Rx abuse are following Rx access policy	DAR

2.8.3.11. Eligibility and Enrollment Reporting

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 58: Representative Reporting - Eligibility and Enrollment User Stories

User Type	Persona	Function	Business Case/User Story
Manager	Healthcare Program Manager/Director	Program Oversight	As a Healthcare Program Manager/Director, I must have access to the aggregated member enrollment counts by aid category combined by additional state classification attributes used to stratify the populations. I must be able to drill through the data by the grouping categories as well as seeing historical trends for the past weeks/months/years. The presentation needs to be in dashboard style visualizations.
Report Creator	Healthcare Analyst	Program Support	As a Healthcare Analyst, I must research discrepancies between the state eligibility system and the MMIS member enrollment data. This requires the ability to create ad hoc reports in search of specific records sourced from the two data sources.

Table 59: Eligibility and Enrollment Reporting Requirements

REQ ID	Eligibility and Enrollment Reporting Requirements	Scope
SR-223	The Bidder must create the full set of identified standard Eligibility and Enrollment Management reports per Pharmacy Management Reporting Requirements elicited and developed during the DDI period.	DAR

2.8.4. Program Integrity (PI) Reporting, Analysis, and Case Management:

Business Case / User Story Alignment: The following table documents representative reporting user stories the Bidder should reference when responding to detailed requirements. The user stories are intended to encourage the Bidder to explain how the solution supports the business team.

Table 60: Representative Program Integrity User Stories

User Type	Persona	Function	Business Case/User Story
Report and File Creator	Healthcare Quality Analysts	Program Oversight	As a Healthcare Quality Analyst, I must perform research through the selection of claims and then perform statistical analysis of the data, calculating key program measures that are reported to CMS.
Manager	Healthcare Program Manager/Director	Program Oversight	As a Healthcare Program Manager/Director, I must have access to the aggregated member enrollment counts by aid category combined by additional state classification attributes used to stratify the populations. I must be able to drill through the data by the grouping categories as well as seeing historical trends for the past weeks/months/years. The presentation needs to be in dashboard style visualizations.
Report and File Creator	Healthcare Program Integrity Analyst	Program Integrity analyst	As a Program Integrity Analyst, I need to set up key variables as part of requesting prompted reports (SURS) used for the peer comparison, exception detection and utilization management of stratified segments of a provider compared to their peer.
Report Creator and Consumer	Healthcare Program Integrity Analyst	Program Integrity analysis	As a Healthcare Program Integrity Analyst, I utilize predefined reports for the ranking, profile, exception, and utilization reporting and support further analysis through ad hoc report generation.

Table 61: Program Integrity Requirements

REQ ID	Program Integrity (PI) Reporting, Analysis, and Case Management Requirements	Scope
SR-224	The Bidder must create the full set of identified standard PI Management reports per Pharmacy Management Reporting Requirements elicited and developed during the DDI period.	DAR
SR-225	The Bidder's solution must provide the ability to perform SURS Ranking Reporting based on user-defined selection criteria.	DAR
SR-226	The Bidder's solution must provide the ability to perform SURS Peer Comparison Analysis based on user-defined selection criteria.	DAR
SR-227	The Bidder's solution must provide the ability to perform SURS Exception Reporting based on user-defined business rules criteria. The solution must have the ability to stratify the results by standard deviation from the norm.	DAR
SR-228	The Bidder's solution must provide the ability to perform SURS Population Analysis based on user-defined selection criteria.	DAR
SR-229	The Bidder's solution must provide the ability to apply member clinical risk analysis as part of SURS reporting analytics.	DAR
SR-230	The Bidder's solution must provide the ability to perform Program Integrity Predictive Analysis of benefit expenditures.	DAR
SR-231	The Bidder's solution must provide the ability for Program Integrity/SURS analysts to create ad hoc reports when researching specific providers or members.	DAR
SR-232	The Bidder's solution must provide the ability to perform Program Integrity Ad hoc Reporting against, at a minimum, the last three years of historical claims/encounter data.	DAR

REQ ID	Program Integrity (PI) Reporting, Analysis, and Case Management Requirements	Scope
SR-233	The Bidder's solution must support the ability to export PI Case information to spreadsheet or reporting analysis.	DAR
SR-234	The Bidder's solution must provide statistical report on Cases Created/Closed over time by case type/work area.	DAR
SR-235	The Bidder's solution must provide reporting of the amount of time spent working each case.	DAR
SR-236	The Bidder's solution must provide reporting on the total time spent per case and the average per case/type.	DAR
SR-237	The Bidder's solution must provide reporting recoveries by case type and source to case.	DAR

2.9. Operational Business Services and Support

The MDWAS Bidders must propose a solution that encompasses the overarching services and support implicit in a complex MDL and DAR engagement. The State envisions a scenario in which the Bidder serves as a true partner and will work with the State to establish a collaborative relationship. The Bidder must be prepared to provide full resources, services, and support to perform all data analytics, report development and management, tool implementation, data warehouse architecture/platform management, and data integration to meet and/or exceed the State's requirements and expectations throughout the life of the contract. Included under Operational Business Services and Support are the following service-oriented capability sub-categories that must be addressed:

2.9.1. Data Lake Business Services

The proposal must detail the Bidder's approach to satisfying the data lake business services and support requirements during the implementation and operations phases of the contract. This strategy should encompass allocating the requisite resources, staff, and training to facilitate system use and efficacy. A successful solution would be characterized by sustained usage across a broad range of knowledgeable users able to capitalize on the full functionality of the system and able to rely on rapid assistance on both day-to-day and advanced operational business needs.

Table 62: Data Warehouse Business Services Requirements

REQ ID	Data Warehouse Business Services Requirements	Scope
SR-238	The Bidder will allocate adequate staff to provide interpretation, guidance, and training services to all State-approved users covering reporting, analytics, and dashboards.	DAR
SR-239	The Bidder will host and facilitate monthly, user-level data and tool information-transfer meetings as prescribed by the State.	DAR
SR-240	The Bidder will provide ongoing coaching and assistance to State approved users covering all aspects of tools and data training.	DAR
SR-241	The Bidder will provide ongoing coaching and assistance to State-authorized users covering report interpretation and data anomaly investigation and resolution when queries and reports return unexpected results.	DAR
SR-242	The Bidder will aid and support to users via the Help Desk functions as described in RFP Section 2.4.15 .	DAR
SR-243	The Bidder will produce training materials that cover each aspect of user engagement with the MDWAS solution (ad hoc creation, report formatting, report library navigation, prompted report execution, visual data analysis, dashboard navigation, tool features).	DAR
SR-244	The Bidder will provide training for each user type as preparation for MDWAS User Acceptance Testing.	DAR
SR-245	The Bidder will conduct post-training surveys and summarize the results for State leadership. Lessons learned from the survey results are to be used to update the training material and methods.	DAR

REQ ID	Data Warehouse Business Services Requirements	Scope
SR-246	The Bidder will work with the State to create data-centric training which focuses on the documentation and understanding of key data attributes which are used to group, stratify, and classify the Vermont Medicaid program data.	DAR
SR-247	The Bidder will provide training for each user type at least quarterly through the life of the contract. The training execution methodology must be documented in DEL – 18; User Training Plan deliverable.	DAR
SR-248	The Bidder will describe how the staffing strategy will support the initial go live period of Phase I while the second phase DDI is still progressing for six (6) months. The details of this approach must be documented in DEL – 3; Staffing Management Plan deliverable.	DAR

2.9.2. Reporting Services

The proposal must detail the Bidder’s approach to satisfying the reporting services and support requirements during the implementation and operations phases of the contract. This strategy should encompass allocating the requisite resources and staff to ensure report responsiveness, accuracy, and performance. This requirement encompasses internal, State, and Federal reporting and supplements replacing the current reporting services provided by the incumbent Vendor. The resources and staff that are allocated to meet the State’s expected reporting service levels should fully support the State through the life of the contract. The expected services should encompass Reporting Consultation and Engagement, and Comprehensive Report Generation.

Table 63: Reporting Services Requirements

REQ ID	Reporting Services Requirements	Scope
SR-249	The Bidder will assist users with the development and execution of queries and/or reports as requested.	DAR
SR-250	The Bidder will assist State-approved users with performing ad hoc reporting via the solution module.	DAR
SR-251	The Bidder will create reports based on State specifications and according to agreed-upon priorities during the operations phase of the contract.	DAR
SR-252	The Bidder will support all predefined reports, including implementing change requests and defect resolutions, according to agreed-upon priorities during the operations phase of the contract.	DAR
SR-253	The Bidder will provide all required documentation as part of report publication and store it in the report library.	DAR
SR-254	The Bidder will define the report development methodology. The State’s preference is a collaborative and iterative approach to report, visualization, and dashboard development.	DAR
SR-255	The Bidder will create and implement the Vermont specific reports identified in the RFP and Bidders’ library during the DDI phase of the contract in order that they are available to the user community at the start of the operations phase of the project.	DAR

2.9.3. Data Analytic Services

The proposal must detail the Bidder’s approach to satisfying the data analytic services and support requirements during the implementation and operations phases of the contract. This strategy should encompass allocating the requisite dedicated and rate card staff to support advanced querying, and visualization activities (including the development of dashboards and scorecards), as well as the anticipated variety of advanced analytics initiatives. These support services are envisioned to assist and enhance the State’s ability to conduct advanced analysis, interpret data patterns, and gain insights based upon the analysis performed in order to better anticipate changing business, management, and policy needs. The expected services should encompass both Advanced Analytics Services and Program Integrity Studies and Analysis Services.

Table 64: Data Analytics Services Requirements

REQ ID	Data Analytic Services Requirements	Scope
SR-256	The Bidder will allocate staff knowledgeable in the application and interpretation of member clinical risk scoring and member care episode analysis content.	DAR
SR-257	<i>(intentionally blank)</i>	
SR-258	The Bidder will allocate staff knowledgeable in the definition and calculation of various healthcare quality measures.	DAR
SR-259	The Bidder will collaborate with external groups and State staff on data analytics and reporting to evaluate how studies are performed and what data is required to address the business question.	DAR
SR-260	The Bidder must allocate staff that can assist State staff in defining SURS reporting parameters for comparison, ranking, profile, and exception reporting.	DAR
SR-261	<i>(intentionally blank)</i>	
SR-262	The Bidder will provide operational analytical/reporting support and expertise of medical billing against program policies.	DAR
SR-263	The Bidder must be able to supply data analytic staff as listed on the staffing rate card within an agreed upon timeframe with the State.	DAR

3. GENERAL REQUIREMENTS:

3.1. **PRICING:** Bidders must price the terms of this solicitation at their best pricing. Any and all costs that Bidder wishes the State to consider must be submitted for consideration. If applicable, all equipment pricing is to include F.O.B. delivery to the ordering facility. No request for extra delivery cost will be honored. All equipment shall be delivered assembled, serviced, and ready for immediate use, unless otherwise requested by the State.

3.1.1. Prices and/or rates shall remain firm for the initial term of the contract. The pricing policy submitted by Bidder must (i) be clearly structured, accountable, and auditable and (ii) cover the full spectrum of materials and/or services required.

3.1.2. **Cooperative Agreements.** Bidders that have been awarded similar contracts through a competitive bidding process with another state and/or cooperative are welcome to submit the pricing in response to this solicitation.

3.1.3. **Retainage.** In the discretion of the State, a contract resulting from this RFP may provide that the State withhold a percentage of the total amount payable for some or all deliverables, such retainage to be payable upon satisfactory completion and State acceptance in accordance with the terms and conditions of the contract.

3.1.3.1. During DDI the State will pay the Bidder in accordance with approved milestones and achievements as outlined in [Table 1](#) and as accepted by the State.

3.1.3.1.1. All DDI invoices are subject to ten (10%) percent withhold and will be made available for payment no less than thirty (30) days past the achievement, formal receipt of CMS certification of the MDWA solution.

3.1.3.2. During the Maintenance and Operations phase, a ten percent (10%) reduction of maintenance and operations costs invoiced monthly, shall be withheld and made available for payment no less than thirty (30) days past the conclusion of the FFY, and only upon completion and State approval of all annual deliverable updates and Contract compliance terms.

3.1.3.3. During the final FFY of the Contract term, the withheld Contract payments shall be held until six (6) months after the Contract expiration or upon certification of Contract completion. This withholding shall be applied to debts arising from unrelated as well as related transactions and to non-contractual as well as contractual debts and to cover any damages SoV may suffer as a result of non-performance that is not detected prior to Contract maturity. Any funds that remain after the six (6) month holding period will be rendered to the Bidder upon final certification of Contract completion.

3.1.3.4. Under no circumstances will the State pay more than fifty percent (50%) of any Bidder invoiced amount that includes incomplete work or Deliverables. The process for SoV review, approval, and final acceptance/sign-off will be jointly negotiated and determined as part of the final award negotiation process.

3.2. **STATEMENT OF RIGHTS:** The State shall have the authority to evaluate Responses and select the Bidder(s) as may be determined to be in the best interest of the State and consistent with the goals and performance requirements outlined in this RFP. The State of Vermont reserves the right to obtain clarification or additional information necessary to properly evaluate a proposal. Failure of bidder to respond to a request for additional information or clarification could result in rejection of that bidder's proposal. To secure a project that is deemed to be in the best interest of the State, the State reserves the right to accept or reject any and all bids, in whole or in part, with or without cause, and to waive technicalities in submissions. The State also reserves the right to make purchases outside of the awarded contracts where it is deemed in the best interest of the State.

3.2.1. **Best and Final Offer (BAFO).** At any time after submission of Responses and prior to the final selection of Bidder(s) for Contract negotiation or execution, the State may invite Bidder(s) to provide a BAFO. The state reserves the right to request BAFOs from only those Bidders that meet the minimum qualification requirements and/or have not been eliminated from consideration during the evaluation process.

3.2.2. **Presentation.** An in-person or webinar presentation by the Bidder may be required by the State if it will help the State's evaluation process. The State will factor information presented during presentations into the evaluation. Bidders will be responsible for all costs associated with providing the presentation.

3.3. **WORKER CLASSIFICATION COMPLIANCE REQUIREMENTS:** In accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), Bidders must comply with the following provisions and requirements.

3.3.1. Self-Reporting: For bid amounts exceeding \$250,000.00, Bidder shall complete the appropriate section in the attached Certificate of Compliance for purposes of self-reporting information relating to past violations, convictions, suspensions, and any other information related to past performance relative to coding and classification of workers. The State is requiring information on any violations that occurred in the previous 12 months.

3.3.2. Subcontractor Reporting: For bid amounts exceeding \$250,000.00, Bidders are hereby notified that upon award of contract, and prior to contract execution, the State shall be provided with a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54). This requirement does not apply to subcontractors providing supplies only and no labor to the overall contract or project. This list MUST be updated and provided to the State as additional subcontractors are hired. A sample form is available online at <http://bgs.vermont.gov/purchasing-contracting/forms>. The subcontractor reporting form is not required to be submitted with the bid response.

3.4. **EXECUTIVE ORDER 05-16: CLIMATE CHANGE CONSIDERATIONS IN STATE PROCUREMENTS:**

For bid amounts exceeding \$25,000.00 Bidders are requested to complete the Climate Change Considerations in State Procurements Certification, which is included in the Certificate of Compliance for this RFP.

After consideration of all relevant factors, a bidder that demonstrates business practices that promote clean energy and address climate change as identified in the Certification, shall be given favorable consideration in the competitive bidding process. Such favorable consideration shall be consistent with and not supersede any preference given to resident bidders of the State and/or products raised or manufactured in the State, as explained in the Method of Award section. But such favorable consideration shall not be employed if prohibited by law or other relevant authority or agreement.

3.5. **METHOD OF AWARD:** Awards will be made in the best interest of the State. The State may award one or more contracts and reserves the right to make additional awards to other

compliant bidders at any time if such award is deemed to be in the best interest of the State. All other considerations being equal, preference will be given first to resident bidders of the state and/or to products raised or manufactured in the state, and then to bidders who have practices that promote clean energy and address climate change, as identified in the applicable Certificate of Compliance.

- 3.5.1. **Evaluation Criteria:** Consideration shall be given to the Bidder's project approach and methodology, qualifications and experience, ability to provide the services within the defined timeline, cost, and/or success in completing similar projects, as applicable, and to the extent specified below.

Evaluation Factors	Total Points for This Factor
Vendor Profile: Experience, Financial Strength, References (Bidder Response Form Part 1)	25%
Vendor Proposal/Solution, Vendor Demonstration (if applicable), Maintenance and Support Services, and ability to meet the State's requirements (Bidder Response Form Part 2-5 and 8)	40%
Professional Implementation Services: Project Management and Technical Services (Bidder Response Form Part 6 and 7)	10%
Pricing, total cost, flexible pricing model, flexible terms, etc. (Bidder Response Form Part 9)	25%
Acceptance of State Terms and Conditions	Pass/Fail
Adherence to Mandatory Bidding Requirements	Pass/Fail

- 3.6. **CONTRACT NEGOTIATION:** Upon completion of the evaluation process, the State may select one or more Bidders with which to negotiate a contract, based on the evaluation findings and other criteria deemed relevant for ensuring that the decision made is in the best interest of the State. In the event State is not successful in negotiating a contract with a selected Bidder, the State reserves the option of negotiating with another Bidder, or to end the proposal process entirely.
- 3.7. **COST OF PREPARATION:** Bidder shall be solely responsible for all expenses incurred in the preparation of a response to this RFP and shall be responsible for all expenses associated with any presentations or demonstrations associated with this request and/or any proposals made.
- 3.8. **CONTRACT TERMS:** The selected bidder(s) will be expected to sign a contract with the State, including the Standard Contract Form and Attachment C, E and F as included in the Procurement Library to this RFP for reference. IT Attachment D is included in this RFP, terms may be modified based upon the solution proposed by the Bidder, subject to approval by the SoV.

- 3.8.1. **Business Registration.** To be awarded a contract by the State of Vermont a vendor (except an individual doing business in his/her own name) must be registered with the Vermont Secretary of State's office <https://bizfilings.vermont.gov/online/Home/Acknowledgement?from=BF> and must obtain a Contractor's Business Account Number issued by the Vermont Department of Taxes <http://tax.vermont.gov/>.
- 3.8.2. The contract will obligate the bidder to provide the services and/or products identified in its bid, at the prices listed.
- 3.8.3. **Payment Terms.** All invoices are to be rendered by the Contractor on the vendor's standard billhead and forwarded directly to the institution or agency ordering materials or services and shall specify the address to which payments will be sent. Payment terms are Net 30 days from receipt of

an error-free invoice with all applicable supporting documentation. Percentage discounts may be offered for prompt payments of invoices; however, such discounts must be in effect for a period of 30 days or more in order to be considered in making awards.

3.8.4. **Quality.** If applicable, all products provided under a contract with the State will be new and unused, unless otherwise stated. Factory seconds or remanufactured products will not be accepted unless specifically requested by the purchasing agency. All products provided by the contractor must meet all federal, state, and local standards for quality and safety requirements. Products not meeting these standards will be deemed unacceptable and returned to the contractor for credit at no charge to the State.

3.9. **DEMONSTRATION:** An in-person or webinar demonstration by the Vendor may be required by the State if it will help the State's evaluation process. The State will factor information presented during demonstrations into the evaluation. Vendors will be responsible for all costs associated with the providing the demonstration.

3.10. **INDEPENDENT REVIEW:** Certain State information technology projects require independent expert review as described under 3 V.S.A. § 3303(d). Such review, if applicable, will inform the State's decision to award any contract(s) resulting from this RFP

4. **CONTENT AND FORMAT OF RESPONSES:** The content and format requirements listed below are the minimum requirements for State evaluation. These requirements are not intended to limit the content of a Bidder's proposal. Bidders may include additional information or offer alternative solutions for the State's consideration. However, the State discourages overly lengthy and costly proposals, and Bidders are advised to include only such information in their response as may be relevant to the requirements of this RFP.

4.1. The bid should include a Cover Letter and Technical Response and Price Schedule.

4.2. **COVER LETTER:**

4.2.1. Confidentiality. To the extent your bid contains information you consider to be proprietary and confidential, you must comply with the following requirements concerning the contents of your cover letter and the submission of a redacted copy of your bid (or affected portions thereof).

4.2.2. All responses to this RFP will become part of the contract file and will become a matter of public record under the State's Public Records Act, 1 V.S.A. § 315 et seq. (the "Public Records Act"). If your response must include material that you consider to be proprietary and confidential under the Public Records Act, your cover letter must clearly identify each page or section of your response that you consider proprietary and confidential. Your cover letter must also include a written explanation *for each marked section* explaining why such material should be considered exempt from public disclosure in the event of a public records request, pursuant to 1 V.S.A. § 317(c), including the prospective harm to the competitive position of the bidder if the identified material were to be released. Additionally, you must include a redacted copy of your response for portions that are considered proprietary and confidential. Redactions must be limited so that the reviewer may understand the nature of the information being withheld. It is typically inappropriate to redact entire pages, or to redact the titles/captions of tables and figures. Under no circumstances may your entire response be marked confidential, and the State reserves the right to disqualify responses so marked.

4.2.3. Exceptions to Contract Terms and Conditions. If a Bidder wishes to propose an exception to any terms and conditions set forth in the Standard Contract Form and its attachments, such exceptions must be included in the cover letter to the RFP response. Failure to note exceptions when responding to the RFP will be deemed to be acceptance of the State contract terms and conditions. If exceptions are not noted in the response to this RFP but raised during contract negotiations, the State reserves the right to cancel the negotiation if deemed to be in the best interests of the State. Note that exceptions to contract terms may cause rejection of the proposal.

4.3. **TECHNICAL RESPONSE.** In response to this RFP, a Bidder shall:

4.3.1. Provide details concerning your form of business organization, company size and resources.

4.3.2. Describe your capabilities and particular experience relevant to the RFP requirements.

4.3.2.1. Identify all current or past State projects.

4.3.3. Identify the names of all subcontractors you intend to use, the portions of the work the subcontractors will perform, and address the background and experience of the subcontractor(s), as per RFP section 4.3.2 above.

- 4.4. **REFERENCES.** Provide the names, addresses, and phone numbers of at least three companies with whom you have transacted similar business in the last 12 months. You must include contact names who can talk knowledgeably about performance.
- 4.5. **REPORTING REQUIREMENTS:** Provide a sample of any reporting documentation that may be applicable to the Detailed Requirements of this RFP.
- 4.6. **PRICE SCHEDULE:** Bidders shall submit their pricing information in the Price Schedule attached to the RFP.
- 4.7. **CERTIFICATE OF COMPLIANCE:** This form must be completed and submitted as part of the response for the proposal to be considered valid.
- 4.8. **STATE OF VERMONT BIDDER RESPONSE FORM:** This form must be completed and submitted as part of the response for the proposal to be considered valid. The State of Vermont Bidder Response Form provides a standard format and content for vendor proposals. When required, this form will prompt Bidders to supply the information required in the above RFP sections 4.3 through 4.6. Note: In addition to completing the State of Vermont Bidder Response Form, Bidders are required to provide the specific attachments that are described within the Bidder Response Form.

5. SUBMISSION INSTRUCTIONS:

5.1. **CLOSING DATE:** Bids must be received by the State by the due date specified on the front page of this RFP. Late bids will not be considered.

5.1.1. The State may, for cause, issue an addendum to change the date and/or time when bids are due. If a change is made, the State will inform all bidders by posting at the webpage indicated on the front page of this RFP.

5.1.2. There will not be a public bid opening. However, the State will record the name, city and state for any and all bids received by the due date. This information will be posted as promptly as possible following the due date online at: <https://bgs.vermont.gov/content/opc-bid-tabulation-sheets-0>. Bidders are hereby notified to review the information posted after the bid opening deadline to confirm receipt of bid by the State. Any bidder that submitted a bid, and is not listed on the bid tabulation sheet, shall promptly notify the State Contact listed on the front page of this RFP. Should a bidder fail to notify the State Contact listed on the front page of this RFP within two weeks of posting the bid tabulation sheet, the State shall not be required to consider the bid.

5.2. **STATE SECURITY PROCEDURES: Please be advised extra time will be needed when visiting and/or delivering information to State of Vermont offices. All individuals visiting State offices must present a valid government issued photo ID when entering the facility.**

5.2.1. During the pendency of the State emergency relating to Covid-19, State office buildings may be locked or otherwise closed to the public. Any delay caused by State Security Procedures will be at the bidder's own risk.

5.3. BID DELIVERY INSTRUCTIONS:

5.3.1. **ELECTRONIC:** Electronic bids will be accepted.

5.3.1.1. **E-MAIL BIDS.** Emailed bids will be accepted. Bids will be accepted via email submission to SOV.ThePathForward@vermont.gov. Bids must consist of a single email with a single, digitally searchable PDF attachment containing all components of the bid. Multiple emails and/or multiple attachments will not be accepted. There is an attachment size limit of 40 MB. It is the Bidder's responsibility to compress the PDF file containing its bid, if necessary, in order to meet this size limitation.

5.3.1.2. **FAX BIDS:** Faxed bids will not be accepted.

6. **BID SUBMISSION CHECKLIST:**

- ✓ Cover Letter
- ✓ Technical Response
- ✓ Redacted Technical Response, if applicable
- ✓ References
- ✓ Price Schedule with Rate Card
- ✓ Signed Certificate of Compliance
- ✓ State of Vermont Bidder Response Form and Attachments

7. **ATTACHMENTS:**

- 7.1. Certificate of Compliance
- 7.2. Worker Classification Compliance Requirement; Subcontractor Reporting Form
- 7.3. State of Vermont Bidder Response Form
- 7.4. ***Procurement Library containing documents related to the scope identified throughout the RFP.***

APPENDIX A. ACRONYMS

Acronym	Definition
ADA	Americans with Disabilities Act of 1990
ADO	Azure DevOps
ADS	Vermont Agency of Digital Services
AHS	Vermont Agency of Human Services
ANSI	American National Standards Institute
API	Application Programming Interface
ARRA	American Recovery and Reinvestment Act
BAA	Business Associate Agreement
BC	Business Continuity
BD	Business Design
BOBJ	BusinessObjects
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CAP	Corrective Action Plan
CFR	Code of Federal Regulations
CHDA	Certified Health Data Analyst
CHIP	Children's Health Insurance Program
CIR	Cyber Incident Report
CMM	Capability Maturity Model
CMP	Certification Management Plan
CMS	Centers for Medicare & Medicaid Services
CONUS	Continental United States
COOP	Continuity of Operations/Disaster Recovery
COS	Category of Service
COTS	Commercial Off the Shelf
CSP	Cloud Service Provider
DAR	Data Analytics and Reporting
DAS	Data Analytics Services
DDD	Detailed Design Document
DDI	Design, Development, and Implementation
DED	Deliverable Expectation Document
DEL	Deliverable
DIID&CD	Data Integration / Interface Design and Control Document
DLP	Data Loss Prevention
DMS	Data Management Strategy
DR	Disaster Recovery
DRS	Designated Record Set

Acronym	Definition
DSH	Disproportionate Share Hospital
DVHA	Department of Vermont Health Access
ETL	Extract, Transform, Load
EVAH	A current data warehouse environment hosted and managed by the incumbent MMIS and Fiscal Agent vendor
EVV	Electronic Visit Verification
FEMA	Federal Emergency Management Agency
FFP	Federal Financial Participation
FFS	Fee-for-Service
FIPS	Federal Information Processing Standard
FTE	Full-Time Equivalent
GR	Global Requirement
GUI	Graphical User Interface
HDP	Help Desk Plan
HEDIS	Healthcare Effectiveness Data and Information Set
HHS	Health and Human Services
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
IAAC	Infrastructure as Code
IBNR	Incurred But Not Reported
IBP	Industry Best Practices
ICD	interface control document
ICSA	International Computer Security Association
IDS	Intrusion Detection System
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IPS	Intrusion Prevention System
IPSEC	Internet Protocol Security
ISO	International Organization for Standardization
JDBC	Java Database Connectivity
JSON	JavaScript Object Notation
KPI	Key Performance Indicators
MDL	Medicaid Data Lake
MDW	Medicaid Data Warehouse
MDWAS	Medicaid Data Warehouse and Analytics Solution
MES	Medicaid Enterprise System
MFA	Multi-Factor Authentication
MITA	Medicaid Infrastructure Technology Architecture

Acronym	Definition
MLR	Medical Loss Ratio
MMIS	Medicaid Management Information System
MPI	Master Person Index
NIST	National Institute of Standards and Technology
OBC	Outcomes Based Certification
ODBC	Open Database Connectivity
OPG	Operating Procedures Guide
PBM	Pharmacy Benefits Management
PHI	Protected Health Information
PI	Program Integrity
PII	Personally Identifiable Information
PMI	Project Management Institute
PMO	Project Management Office
PMP	Project Management Professional
PMR	Project Management Repository
POA&M	Plan of Action and Milestones
PPACA	Patient Protection and Affordable Care Act
QMP	Quality Management Plan
QMS	Quality Management System
RACI	Responsible, Accountable, Consulted, Informed
RDBMS	Relational Database Management System
RFP	Request for Proposal
RHIA	Registered Health Information Administrator
RMP	Risk Management Plan
RTM	Requirements Traceability Matrix
RTO	Return to Operations
SaaS	Software as a Service
SDD	System Design Document
SDLC	Software Development Life Cycle
SEI	Software Engineering Institute
SHO	State Health Official
SIEM	Security Incident and Event Management
SIT	Systems Integration Testing
SLA	Service Level Agreement
SMA	State Medicaid Agency
SMM	State Medicaid Manual
SMP	Staffing Management Plan
SOA	Service Oriented Architecture

Acronym	Definition
SOC	Service Organization Control
SoV	State of Vermont
SPSS	Statistical Package for Social Sciences
SQL	Structured Query Language
SR	Solution Requirement
SSA	Social Security Administration
SSAE	Standards for Attestation Engagements
SSL	Secure Socket Layer
SSP	System Security Plan
STP	System Testing Plan
SURS	Surveillance and Utilization Review System
T-MSIS	Transformed Medicaid Statistical Information System
TO&COP	Turnover and Closeout Plan
TPL	Third Party Liability
TQM	Total Quality Management
UAT	User Acceptance Testing
UTP	User Training Plan
VITL	Vermont Information Technology Leaders
WBS	Work Breakdown Structure
WBT	Web-Based Training

CERTIFICATE OF COMPLIANCE

For a bid to be considered valid, this form must be completed in its entirety, executed by a duly authorized representative of the bidder, and submitted as part of the response to the proposal.

- A. **NON-COLLUSION:** Bidder hereby certifies that the prices quoted have been arrived at without collusion and that no prior information concerning these prices has been received from or given to a competitive company. If there is sufficient evidence to warrant investigation of the bid/contract process by the Office of the Attorney General, bidder understands that this paragraph might be used as a basis for litigation.
- B. **CONTRACT TERMS:** Bidder hereby acknowledges that is has read, understands and agrees to the terms of this RFP, including Attachment C: Standard State Contract Provisions, and any other contract attachments included with this RFP.

C. **FORM OF PAYMENT:** Does Bidder accept the Visa Purchasing Card as a form of payment?

___ Yes ___ No

D. **WORKER CLASSIFICATION COMPLIANCE REQUIREMENT:** In accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), the following provisions and requirements apply to Bidder when the amount of its bid exceeds \$250,000.00.

Self-Reporting. Bidder hereby self-reports the following information relating to past violations, convictions, suspensions, and any other information related to past performance relative to coding and classification of workers, that occurred in the previous 12 months.

Summary of Detailed Information	Date of Notification	Outcome

Subcontractor Reporting. Bidder hereby acknowledges and agrees that if it is a successful bidder, prior to execution of any contract resulting from this RFP, Bidder will provide to the State a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), and Bidder will provide any update of such list to the State as additional subcontractors are hired. Bidder further acknowledges and agrees that the failure to submit subcontractor reporting in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54) will constitute non-compliance and may result in cancellation of contract and/or restriction from bidding on future state contracts.

E. Executive Order 05 – 16: Climate Change Considerations in State Procurements Certification

Bidder certifies to the following (Bidder may attach any desired explanation or substantiation. Please also note that Bidder may be asked to provide documentation for any applicable claims):

1. Bidder owns, leases or utilizes, for business purposes, space that has received:
- Energy Star® Certification
 - LEED®, Green Globes®, or Living Buildings ChallengeSM Certification
 - Other internationally recognized building certification:
-

2. Bidder has received incentives or rebates from an Energy Efficiency Utility or Energy Efficiency Program in the last five years for energy efficient improvements made at bidder's place of business. Please explain:
-

3. Please Check all that apply:
- Bidder can claim on-site renewable power or anaerobic-digester power ("cow-power"). Or bidder consumes renewable electricity through voluntary purchase or offset, provided no such claimed power can be double claimed by another party.
 - Bidder uses renewable biomass or biofuel for the purposes of thermal (heat) energy at its place of business.
 - Bidder's heating system has modern, high-efficiency units (boilers, furnaces, stoves, etc.), having reduced emissions of particulate matter and other air pollutants.
 - Bidder tracks its energy consumption and harmful greenhouse gas emissions. What tool is used to do this? _____
 - Bidder promotes the use of plug-in electric vehicles by providing electric vehicle charging, electric fleet vehicles, preferred parking, designated parking, purchase or lease incentives, etc.
 - Bidder offers employees an option for a fossil fuel divestment retirement account.
 - Bidder offers products or services that reduce waste, conserve water, or promote energy efficiency and conservation. Please explain:
-
-

4. Please list any additional practices that promote clean energy and take action to address climate change:
-
-
-

F. Acknowledge receipt of the following Addenda:

Addendum No.: _____ Dated: _____

Addendum No.: _____ Dated: _____

Addendum No.: _____ Dated: _____

Bidder Name: _____ Contact Name: _____

Address: _____ Fax Number: _____

_____ Telephone: _____

_____ E-Mail: _____

By: _____ Name: _____
Signature of Bidder (or Representative) (Type or Print)

END OF CERTIFICATE OF COMPLIANCE

SUBCONTRACTOR REPORTING FORM

This form must be completed in its entirety and submitted prior to contract execution and updated as necessary and provided to the State as additional subcontractors are hired.

The Department of Buildings and General Services in accordance with Act 54, Section 32 of the Acts of 2009 and for total project costs exceeding \$250,000.00 requires bidders to comply with the following provisions and requirements.

Contractor is required to provide a list of subcontractors on the job along with lists of subcontractor's subcontractors and by whom those subcontractors are insured for workers' compensation purposes. Include additional pages if necessary. This is not a requirement for subcontractor's providing supplies only and no labor to the overall contract or project.

Subcontractor	Insured By		Subcontractor's Sub	Insured By

Date: _____

Name of Company: _____

Contact Name: _____

Address: _____

Title: _____

Phone Number: _____

E-mail: _____

Fax Number: _____

By: _____

Name: _____

Failure to adhere to Act 54, Section 32 of the Acts of 2009 and submit Subcontractor Reporting: Worker Classification Compliance Requirement will constitute non-compliance and may result in cancellation of contract and/or forfeiture of future bidding privileges until resolved.

Send Completed Form to: Office of Purchasing & Contracting
109 State Street
Montpelier, VT 05609-3001

State of Vermont Bidder Response Form

The Vermont Bidder Response Form must be included in all RFPs for technology implementation.