

**STATE OF MICHIGAN**  
**DEPARTMENT OF MANAGEMENT AND BUDGET**  
**PURCHASING OPERATIONS**  
**P.O. BOX 30026, LANSING, MI 48909**  
 OR  
**530 W. ALLEGAN, LANSING, MI 48933**

June 30, 2009

**CHANGE NOTICE NO. 1**  
**TO**  
**CONTRACT NO. 071B8200295**  
**between**  
**THE STATE OF MICHIGAN**  
**and**

NAME & ADDRESS OF CONTRACTOR <b>Enfotech &amp; Consulting, Inc.</b> <b>11 Princess Road, Unit A</b> <b>Lawrenceville, NJ 08648</b>  Email: <a href="mailto:tony_jeng@enfotech.com">tony_jeng@enfotech.com</a>	TELEPHONE Tony C. Jeng <b>(609) 896-9777</b>
	CONTRACTOR NUMBER/MAIL CODE
	BUYER/CA (517) 335-4804 <b>Douglas S. Collier</b>
Contract Compliance Inspector: Peter Devlin (517) 241-8515 <b>MICH AIR EMISSIONS REPORTING SYSTEM</b>	
CONTRACT PERIOD: From: <b>September 5, 2008</b> To: <b>August 30, 2011</b>	
TERMS <p style="text-align: center;"><b>N/A</b></p>	SHIPMENT <p style="text-align: center;"><b>N/A</b></p>
F.O.B. <p style="text-align: center;"><b>N/A</b></p>	SHIPPED FROM <p style="text-align: center;"><b>N/A</b></p>
MINIMUM DELIVERY REQUIREMENTS <p style="text-align: center;"><b>N/A</b></p>	
MISCELLANEOUS INFORMATION:	

**NATURE OF CHANGE(S):**

Effective immediately, this contract is **INCREASED \$116,500.00**. In addition, the attached statement of work, provides for the upgrade of eNode 2.0 and related services.

**AUTHORITY/REASON(S):**

Per Ad Board approval dated June 16, 2009, agreement from DMB-Purchasing Operations and written agreement from the vendor dated June 3, 2009.

**INCREASE: \$116,500.00**

**TOTAL REVISED ESTIMATED CONTRACT VALUE: \$1,155,340.00**

## Statement of Work

### MAERS Project: Change Request – Upgrade to Node 2.0

#### Background:

Michigan Department of Environmental Quality (MDEQ) has been operating Node 1.1 since 2003. The Node currently supports six (6) data flows to & from Environmental Protection Agency (EPA). EPA published a new Node protocol in 2007, which confirmed that EPA Central Data Exchange (CDX) has switched from the Node 1.1 to 2.0 protocol and the support for the Node 1.1 is expected to end as early as spring-summer 2010. Based on preliminary review, it is understood that the Node 2.0 protocol will not provide backward compatibility to support Node 1.1 or any data flows established under the Node 1.1 protocol. EPA is requiring all States to submit air emission data (National Emissions Inventory (NEI)) to CDX and mandates all future NEI data flows be submitted in the Consolidated Emissions Reporting Schema (CERS) schema using Node 2.0 as of 2010.

In 2007, MDEQ had applied for a grant application prepared under the guideline provided for the category of "Infrastructure – supports the development or upgrade of Nodes or Node clients and associated data flows to Node 2.0" in the Exchange Network Grant Program. An approval of this grant entitled "Fiscal Year 2008 Environmental Information Exchange Network Grant" was received by MDEQ for \$130,000.00, against which \$120,000.00 is allocated for purchasing a software solution. The actual software cost from enfoTech & Consulting is only \$116,560.00.

#### Project Scope:

MDEQ Air Quality Division (AQD) is currently implementing the Michigan Air Emissions Reporting System (MAERS) project. This project will be implemented by November 2009 and will be fully complete by July 2010. This project is developing a new NEI data flow which will require DEQ to establish a Node 2.0 infrastructure as soon as possible. Due to the above mentioned directive MDEQ AQD is forced to upgrade the Node as a **Change Request** to the implementation of the MAERS Rewrite project. Implementing this upgrade at this phase of the MAERS project will result in significant cost savings compared to the cost of implementing needed changes if the MAERS project were to be completed using the soon-to-be obsolete Node 1.1 protocol.

enfoTech & Consulting from New Jersey is under contract with the State of Michigan to implement the MAERS Rewrite project. Based on research and analysis, MDEQ has found that "eNode 2008" a COTS (Commercial-Off-The-Shelf) product, from enfoTech, has all the Node 2.0 features.

The scope of this change request will include the purchase of "eNode 2008", upgrade of the existing Node from the Node 1.1 protocol to 2.0, and upgrading the existing data flows in MDEQ, as identified below, to Node 2.0.

The upgrade of the Node will significantly help the MAERS Rewrite project such that the NEI data flow, used for air dispersion modeling, regional strategy development, regulation setting, air toxics risk assessment, and tracking trends in emissions over time, will become fully operational once Node 2.0 is implemented.

This change request will also upgrade the following six Data Flows to Node 2.0:

1. Discharge Monitoring Reports (DMR) from industry to state to Environmental Protection Agency (EPA) for the National Pollutant Discharge Elimination System (NPDES) wastewater program. This data flow will map to the ICIS NPDES schema.
2. Toxic Release Inventory (TRI) data flow to accept TRI (Extended Markup Language) XML data file from EPA to MDEQ. Upgrade the dataflow to include the migration of the existing dataflow.
3. Electronic Retired Engineers Technical Assistance Program (eRETAP) data flow to accept RETAP XML data file from Retired Engineers Technical Assistance Foundation (RETAF) office to MDEQ. Upgrade the dataflow to include the migration of the existing dataflow.

4. Drinking Water Facility Data flow (eDWR- Electronic Drinking Water Reports) from MDEQ to EPA. Upgrade the dataflow to include the migration of the existing dataflow.
5. Water Quality Exchange (WQX) water quality data flow from MDEQ to EPA. Create a new dataflow from the WQX Database (EPA provided the structure of the WQX database) to the Node.
6. Resource Conservation and Recovery Act Information (RCRAInfo) which is currently under development and future e-manifest data flow from MDEQ to EPA and back to MDEQ. Provide the API's and training to add the dataflows to Node2.0

The implementation of this project shall encompass the following major components and will have the following expected outcomes:

- a) Develop or verify existing logical data mapping between databases and schema elements.
- b) Write stored procedures (or using data conversion software) to retrieve data from state database based on submission requirements, if applicable.
- c) Transform received data to an XML Instance Document based on Standard Schema to the XML format required by CDX.
- d) Develop applicable data flow plug-ins for the Node 2.0.
- e) Work with CDX to test all re-written data flow plug-in's.
- f) Deploy production versions of each of the data flows.
- g) Become a Node 2.0 user
- h) Upgrade the existing data flows to be compatible under the Node 2.0 environment.
- i) Re-use of existing exchange network infrastructure and shared tools to achieve economic savings for industry, Michigan's and EPA's environmental program areas

**Deliverables:**

This Change Request shall consist of the following major deliverables:

- i. A document that outlines the "final" version of the Node 2.0 specification from EPA
- ii. A Traceability matrix to compare and verify the functionalities between enfoTech's "eNode 2008" and EPA's requirements for Node 2.0.
- iii. Develop a system test plan in accordance with the best business practices, MDEQ requirements, and EPA's QA guidelines.
- iv. Upgrade existing Michigan State Node from 1.1 to 2.0
  - iv.1. Install Node 2.0 software at MDEQ environment
  - iv.2. Conduct system testing in accordance with the system test document, fix deficiencies detected from the testing phase, and document the test results
  - iv.3. Deploy production version of Node 2.0
- v. Upgrade the data flows as mentioned in this change request to be compatible in Node 2.0
  - v.1. Re-Mapping of the data flow (All data flows should comply with current & upcoming schema (if details are available))
  - v.2. Conduct system testing in accordance with the system test document, fix deficiencies detected from the testing phase, and document the test results
  - v.3. Successfully submit the XML instance documents
  - v.4. Deploy the new system
- vi. Provide training to create a new data flow and to maintain/administer the existing code (Webex will be acceptable) for System Users of the Node, System Administrators and MDIT Staff who will be maintaining the code. This training will include an onsite training of the Core Node technology (Architecture and Programming) and the configuration of the Data Flows.
- vii. The system should also have the capability to capture error logs to track any future issues with the Node or Data flows. There should be a separation of the source code of the data flow and the Core Node (otherwise any schema changes from EPA will put down the whole Node when changes need to be made for one data flow.)
- viii. Provide system documentation, which will outline step by step procedures for modifying the data flow.
  - viii.1. The documentation will also describe the node architecture and interfaces to the degree of specificity necessary for the State of Michigan, or its agents to modify existing data flows or develop new data flows upon the "eNode 2008".

- viii.2. enfoTech will make itself available to the State of Michigan, or it's agents to inquire on the specifics of developing or modifying interfaces to "eNode 2008".

**Acceptance Criteria:**

The following conditions will need to be fully met for accepting the Node Upgrades & deliverables:

- All Node upgrades will need to be rolled out, fully tested; such that all bugs are completely fixed
- The Node upgrade should be properly functioning for at least 20 business days, with no errors
- MDIT Project Manager & Agency owner of each data flow has given acceptance approval

**Project Impact:**

- The NEI data flow is a "must-have" component for the AQD to satisfy reporting requirements mandated by EPA
- The MAERS NEI data flow is scheduled for development in June 2009 and will require that the DEQ Node be upgraded to Node 2.0. Since the DEQ Node 2.0 upgrade has not yet started, this becomes a high risk factor to the MAERS project success.
- This EPA grant will expire in 2010, if it is not used within the grant's time frame.
- The Node upgrade is essential for MDEQ to effectively participate in the EN community in the future.

This change request will abide by all the technical and functional specifications as defined by the MAERS Rewrite project contract. All source code for software & customizations will be delivered to the State of Michigan by the vendor, enfoTech & Consulting, per this Change Request. The MDIT Agency Services staff will assume the lead role in long term maintenance and enhancement of the system. enfoTech & Consulting will have a maintenance contract for the Node, based on funding availability at MDEQ. The Node application will be available 24 hours a day, 7 days a week.



Sales: 609.896.9777  
Support: 609.896.2827  
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www.enfotech.com

June 3, 2009

Mr. Stanley Samuel  
MAERS Project Manager  
Michigan Department of Information Technology  
530 West Allegan Street  
Lansing, MI 48933

**Subject: MAERS Rebuilt Project – Change Request #3 (Revision #1)**

Dear Mr. Samuel:

enfoTech has completed a 2-day onsite MAERS Alpha System Review and NEI Data Flow discussion with the SOM on March 10 to 11, 2009. The meeting has resulted in several important issues that will require attention. In responding to the SOM's request, enfoTech has prepared this document to explain the issues and provide recommendations.

**(A) Issue Identification**

Issue descriptions and their potential impacts to the project are summarized below:

Issue	Description
1. Michigan Node 2.0 Infrastructure Upgrade	<p><b>Background:</b></p> <ul style="list-style-type: none"><li>• DEQ operates a Node 1.1 since 2003. The Node currently supports eight (8) data flows. EPA published a new Node protocol in 2007 and has required all states to upgrade their Nodes and data flows to the 2.0 protocol.</li><li>• EPA CDX has switched from the Node 1.1 to 2.0 protocol and the support for the Node 1.1 is expected to end as early as spring-summer 2010.</li><li>• EPA requires states to submit air emission data (NEI) to CDX and mandates all future NEI data flows be submitted in the CERS schema using Node 2.0 protocol. AQD is developing a new NEI data flow under the MAERS project, but will require DEQ to establish a Node 2.0 infrastructure ASAP.</li><li>• enfoTech is the solution provider for the DEQ Node 1.1 system. enfoTech has a new Node 2.0 system available.</li><li>• DEQ's Node 2.0 upgrade has not yet started.</li></ul> <p><b>Project Impact:</b></p> <ul style="list-style-type: none"><li>• The NEI data flow is a "must-have" component for the AQD to satisfy reporting requirements mandated by EPA</li><li>• The MAERS NEI data flow is scheduled for development in June 2009 and will require that the DEQ Node be upgraded to Node 2.0. Since the DEQ Node 2.0 upgrade has not yet started, this becomes a high risk factor to the MAERS project success.</li></ul>

**(B) Potential Options**

enfoTech has analyzed the pro-and-con of the NEI data flow development between the 2.0 and 1.1 platform and would like to summarize our analysis below.

**1. Michigan Node 2.0 Upgrade:**

<b>Option</b>	<b>Pros</b>	<b>Cons</b>
1. Upgrade Michigan Node to 2.0 Protocol	<ul style="list-style-type: none"> <li>• Provide the infrastructure needed to support the NEI data flow development</li> <li>• The new NEI data flow will comply with the CDX new Node 2.0 protocol</li> <li>• Will simultaneously upgrade DEQ's current applicable data flows from 1.1 to 2.0 protocol</li> </ul>	<ul style="list-style-type: none"> <li>• Will incur additional cost now</li> </ul>
2. Continue to use Michigan Node 1.1	<ul style="list-style-type: none"> <li>• No additional cost for now</li> </ul>	<ul style="list-style-type: none"> <li>• MAERS NEI data flow will be developed in Node 1.1 protocol which will be obsolete soon</li> <li>• Will require a costly redo to migrate the NEI data flow to Node 2.0 (in 12-18 months) when DEQ Node is finally ready in the future</li> </ul>

**Recommendations:**

- Upgrade DEQ Node 1.1 to 2.0 infrastructure
- Upgrade the existing applicable data flows to work with the Node 2.0 (to remain in EPA's reporting compliance for these program areas). Support one future RCRAInfo data flow when it is ready.
- Develop the new NEI data flow on the Node 2.0 platform
- Approve this project change request to provide a vehicle for AQD to develop a new NEI data flow to satisfy EPA's reporting requirements under the Node2.0 protocol

**(C) Cost Estimate to Implement Recommendations**

The estimated cost to implement the recommendations outlined in Section B above is estimated at \$ 116,560. A cost breakdown is provided below.

<b>Product and Service Description</b>	<b>Cost</b>
1. A document that outlines the "final" version of the Node 2.0 specification from EPA	\$ 2,000
2. A Traceability matrix to compare and verify the functionalities between enfoTech's "eNode 2008" and EPA's requirements for Node 2.0.	\$ 4,560
3. Develop a system test plan in accordance with the best business practices, MDEQ requirements, and EPA's QA guidelines.	\$ 8,000

Product and Service Description	Cost
4. Upgrade existing Michigan State Node from 1.1 to 2.0. This includes: <ul style="list-style-type: none"> <li>• 1-day eNode2008 installation at MDEQ environment</li> <li>• Conduct system testing in accordance with the system test document, fix deficiencies detected from the testing phase, and document the test results</li> <li>• Deploy production version of eNode2008 software</li> </ul>	\$ 18,500
5. Develop NEI data flow in Node 2.0 protocol and upgrade existing six (6) data flows to be compatible in Node 2.0 protocol. They include:	
1) Develop NEI data in Node 2.0 protocol (new development)	N/C <sup>1</sup>
2) DMR data flow. This data flow will be mapped to ICIS-NPDES.	\$ 26,000
3) TRI data file from US EPA. Upgrade the dataflow to include the migration of the existing dataflow.	\$ 12,000
4) eRETAP data flow (from RETAF to MDEQ)	\$ 12,000
5) Drinking Water Facility data flow (eDWR – electronic drinking water reports) to MDEQ	N/C
6) Water Quality Exchange (WQX) water quality data flow from MDEQ to EPA. Create a new dataflow from the WQX Database (EPA provided the structure of the WQX database) to the Node	\$ 28,000
7) Resource Conservation and Recovery Act Information (RCRAInfo) which is currently under development and future e-manifest data flow from MDEQ to EPA and back to MDEQ. enfoTech will provide the API's and training support to add the data flows to eNode2008. Actual data flow implementation will not be performed by others.	N/C
6. Provide training for System Users of the Node, System Administrators and MDIT Staff who will be maintaining the code	\$ 1,500
7. Provide system documentation which will outline step by step procedures for modifying the data flow	\$ 4,000
<ul style="list-style-type: none"> <li>• The documentation will also describe the node architecture and interfaces to the degree of specificity necessary for the State of Michigan, or its agents to modify existing data flows or develop new data flows upon the "eNode 2008".</li> </ul>	
<ul style="list-style-type: none"> <li>• enfoTech will make itself available to the State of Michigan, or it's agents to inquire on the specifics of developing or modifying interfaces to "eNode 2008".</li> </ul>	
<b>Total:</b>	<b><u>\$ 116,560</u></b>

<sup>1</sup> NEI data flow development has been covered under the current MAERS project. enfoTech will provide in-kind services to upgrade the flow to Node 2.0 protocol at no additional cost.

**(D) Acceptance Criteria of Deliverable**

enfoTech recommends the following deliverable acceptance criteria.

<b>Product and Service Description</b>	<b>Acceptance criteria</b>
1. A document that outlines the "final" version of the Node 2.0 specification from EPA	The required document is delivered to DEQ and approved by MDIT Project Manager
2. A Traceability matrix to compare and verify the functionalities between enfoTech's "cNode 2008" and EPA's requirements for Node 2.0.	The Traceability matrix document is delivered to DEQ and approved by MDIT Project Manager
3. Develop a system test plan in accordance with the best business practices, MDEQ requirements, and EPA's QA guidelines.	The system test plan document is delivered to DEQ and approved by MDIT Project Manager
4. Upgrade existing Michigan State Node from 1.1 to 2.0. This includes the installation of the following Node software at MDEQ environment:	eNode2008 software is installed at MDEQ environment and is properly functioning for 20 days.
5. Upgrade existing six (6) data flows to the Node 2.0 protocol. They include:	For data flow 1 through 5:
1) DMR data flow. This data flow will be mapped to ICIS-NPDES.	<ul style="list-style-type: none"> <li>• Upgrade , test &amp; fix any bugs for the each data flow to operate under the eNode2008</li> </ul>
2) TRI data file from US EPA. Upgrade the dataflow to include the migration of the existing dataflow.	<ul style="list-style-type: none"> <li>• Data flows should properly function for at least 20 business days</li> </ul>
3) eRETAP data flow (from RETAF to MDEQ)	<ul style="list-style-type: none"> <li>• MDIT Project Manager &amp; Agency owner of each data flow has given acceptance approval</li> </ul>
4) Drinking Water Facility data flow (eDWR – electronic drinking water reports) to MDEQ	For data flow #6 (RCRA):
5) Water Quality Exchange (WQX) water quality data flow from MDEQ to EPA. Create a new dataflow from the WQX Database (EPA provided the structure of the WQX database) to the Node	<ul style="list-style-type: none"> <li>• Provides support to RCRAInfo data flow (currently under development) to work with the eNode2008 when it the RCRAInfo is ready for testing.</li> </ul>
6) Resource Conservation and Recovery Act Information (RCRAInfo) which is currently under development and future e-manifest data flow from MDEQ to EPA and back to MDEQ. enfoTech will provide the API's and training support to add the data flows to eNode2008. Actual data flow implementation will not be performed by others.	

<b>Product and Service Description</b>	<b>Acceptance criteria</b>
6. Provide training for System Users of the Node, System Administrators and MDIT Staff who will be maintaining the code	<ul style="list-style-type: none"><li>• Provide a 1-day onsite training of the Core Node technology (Architecture and Programming) and the configuration of the Data Flows.</li><li>• Provide training to create a new data flow and to maintain/administer the existing code for System Users of the Node, System Administrators and MDIT Staff who will be maintaining the code.</li></ul>
7. Provide system documentation which will outline step by step procedures for modifying the data flows	<ul style="list-style-type: none"><li>• Documentation is delivered and approved by MDIT Project Manager</li></ul>

This change request will abide by all the technical and functional specifications as defined by the MAERS Rewrite project contract (071B8200295). All source code for software & customizations made per this Change Request will be delivered to the State of Michigan.

**(E) Payment Schedule**

enfoTech recommends a deliverable payment schedule. Payment shall be made in accordance with cost tied to each deliverable listed in the Section C Cost Table. An invoice will be issued to SOM for the deliverable(s) completed and approved by SOM.

Thank you for reviewing this report. We are available to discuss them further with you after you have evaluated recommendations presented in this report.

Sincerely,



Tony C. Jeng  
Executive Vice President

cc: Sony Su

**STATE OF MICHIGAN**  
**DEPARTMENT OF MANAGEMENT AND BUDGET**  
**PURCHASING OPERATIONS**  
**P.O. BOX 30026, LANSING, MI 48909**  
 OR  
**530 W. ALLEGAN, LANSING, MI 48933**

September 17, 2008

**NOTICE**  
**OF**  
**CONTRACT NO. 071B8200295**  
**between**  
**THE STATE OF MICHIGAN**  
**and**

NAME & ADDRESS OF CONTRACTOR <b>Enfotech &amp; Consulting, Inc.</b> <b>11 Princess Road, Unit A</b> <b>Lawrenceville, NJ 08648</b>  <p style="text-align: right;">Email: <a href="mailto:tony_jeng@enfotech.com">tony_jeng@enfotech.com</a></p>	TELEPHONE Tony C. Jeng <b>(609) 896-9777</b>
	CONTRACTOR NUMBER/MAIL CODE
	BUYER/CA (517) 335-4804 <b>Douglas S. Collier</b>
Contract Compliance Inspector: Peter Devlin (517) 241-8515 <p style="text-align: center;"><b>MICH AIR EMMISSONS REPORTING SYSTEM</b></p>	
CONTRACT PERIOD: From: <b>September 5, 2008</b> To: <b>August 30, 2011</b>	
TERMS <p style="text-align: center;"><b>N/A</b></p>	SHIPMENT <p style="text-align: center;"><b>N/A</b></p>
F.O.B. <p style="text-align: center;"><b>N/A</b></p>	SHIPPED FROM <p style="text-align: center;"><b>N/A</b></p>
MINIMUM DELIVERY REQUIREMENTS <p style="text-align: center;"><b>N/A</b></p>	
MISCELLANEOUS INFORMATION:	

**Estimated Contract Value: \$1,038,780.00**

**STATE OF MICHIGAN  
 DEPARTMENT OF MANAGEMENT AND BUDGET  
 PURCHASING OPERATIONS  
 P.O. BOX 30026, LANSING, MI 48909  
 OR  
 530 W. ALLEGAN, LANSING, MI 48933**

**CONTRACT NO. 071B8200295  
 between  
 THE STATE OF MICHIGAN  
 and**

NAME & ADDRESS OF CONTRACTOR <b>Enfotech &amp; Consulting, Inc.          11 Princess Road, Unit A          Lawrenceville, NJ 08648</b>	TELEPHONE Tony C. Jeng <b>(609) 896-9777</b> CONTRACTOR NUMBER/MAIL CODE BUYER/CA (517) 335-4804 <b>Email: Douglas S. Collier</b>
Contract Compliance Inspector: Peter Devlin (517) 241-8515 <b>MICH AIR EMISSIONS REPORTING SYSTEM</b>	
CONTRACT PERIOD: From: <b>September 5, 2008</b> To: <b>August 30, 2011</b>	
TERMS <p style="text-align: center;"><b>N/A</b></p>	SHIPMENT <p style="text-align: center;"><b>N/A</b></p>
F.O.B. <p style="text-align: center;"><b>N/A</b></p>	SHIPPED FROM <p style="text-align: center;"><b>N/A</b></p>
MINIMUM DELIVERY REQUIREMENTS <p style="text-align: center;"><b>N/A</b></p>	
MISCELLANEOUS INFORMATION: <b>The terms and conditions of this Contract are those of ITB #07118200188 and this Contract Agreement. In the event of any conflicts between the specifications, and terms and conditions, indicated by the State and those indicated by the vendor, those of the State take precedence.</b>  <b>Estimated Contract Value: \$1,038,780.00</b>	

**All terms and conditions of the invitation to bid are made a part hereof.**

<b>FOR THE CONTRACTOR:</b>  Enfotech & Consulting Inc. <hr/> Firm Name  <hr/> Authorized Agent Signature  <hr/> Authorized Agent (Print or Type)  <hr/> Date	<b>FOR THE STATE:</b>  <hr/> Signature Greg Faremouth, Director <hr/> Name/Title IT Division <hr/> Division  <hr/> Date
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**DEFINITIONS**

Days	Means calendar days unless otherwise specified.
24x7x365	Means 24 hours a day, seven days a week, and 365 days a year (including the 366th day in a leap year).
Additional Service	Means any Services/Deliverables within the scope of the Contract, but not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration.
Audit Period	See Section 2.110
Business Day	Whether capitalized or not, shall mean any day other than a Saturday, Sunday or State-recognized legal holiday (as identified in the Collective Bargaining Agreement for State employees) from 8:00am EST through 5:00pm EST unless otherwise stated.
Blanket Purchase Order	An alternate term for Contract as used in the States computer system.
Business Critical	Any function identified in any Statement of Work as Business Critical.
Chronic Failure	Defined in any applicable Service Level Agreements.
Deliverable	Physical goods and/or commodities as required or identified by a Statement of Work
DMB	Michigan Department of Management and Budget
Environmentally preferable products	A product or service that has a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Such products or services may include, but are not limited to, those that contain recycled content, minimize waste, conserve energy or water, and reduce the amount of toxics either disposed of or consumed.
Excusable Failure	See Section 2.244.
Hazardous material	Any material defined as hazardous under the latest version of federal Emergency Planning and Community Right-to-Know Act of 1986 (including revisions adopted during the term of the Contract).
Incident	Any interruption in Services.
ITB	A generic term used to describe an Invitation to Bid. The ITB serves as the document for transmitting the RFP to potential bidders
Key Personnel	Any Personnel designated in Article 1 as Key Personnel.
New Work	Any Services/Deliverables outside the scope of the Contract and not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration.
Ozone-depleting substance	Any substance the Environmental Protection Agency designates in 40 CFR part 82 as: (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or (2) Class II, including, but not limited to, hydro chlorofluorocarbons
Post-Consumer Waste	Any product generated by a business or consumer which has served its intended end use, and which has been separated or diverted from solid waste for the purpose of recycling into a usable commodity or product, and which does not include post-industrial waste.
Post-Industrial Waste	Industrial by-products that would otherwise go to disposal and wastes generated after completion of a manufacturing process, but do not include internally generated scrap commonly returned to industrial or manufacturing processes.
Recycling	The series of activities by which materials that are no longer useful to the generator are collected, sorted, processed, and converted into raw materials and used in the production of new products. This definition excludes the use of these materials as a fuel substitute or for energy production.
Deleted – Not Applicable	Section is not applicable or included in this RFP. This is used as a placeholder to maintain consistent numbering.
Reuse	Using a product or component of municipal solid waste in its original form more than once.
RFP	Request for Proposal designed to solicit proposals for services



Services	Any function performed for the benefit of the State.
Source reduction	Any practice that reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, energy recovery, treatment, or disposal.
State Location	Any physical location where the State performs work. State Location may include state-owned, leased, or rented space.
Subcontractor	A company Contractor delegates performance of a portion of the Services to, but does not include independent contractors engaged by Contractor solely in a staff augmentation role.
Unauthorized Removal	Contractor's removal of Key Personnel without the prior written consent of the State.
Waste prevention	Source reduction and reuse, but not recycling.
Waste reduction and Pollution prevention	The practice of minimizing the generation of waste at the source and, when wastes cannot be prevented, utilizing environmentally sound on-site or off-site reuse and recycling. The term includes equipment or technology modifications, process or procedure modifications, product reformulation or redesign, and raw material substitutions. Waste treatment, control, management, and disposal are not considered pollution prevention, per the definitions under Part 143, Waste Minimization, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended.
Work in Progress	A Deliverable that has been partially prepared, but has not been presented to the State for Approval.
Work Product	Refers to any data compilations, reports, and other media, materials, or other objects or works of authorship created or produced by the Contractor as a result of an in furtherance of performing the services required by this Contract.



## **Article 1 – Statement of Work (SOW)**

### **1.000 Project Identification**

#### **1.001 Project Request**

The State of Michigan (SOM), through the Department of Management & Budget (DMB), with assistance of the Department of Information Technology (DIT) and the Michigan Department of Environmental Quality (MDEQ), has issued this contract to provide project management and business requirements in order to design and develop a replacement of the existing Michigan Air Emissions Reporting System (MAERS). This new application includes interfaces with described applications, training, maintenance and support, either identified through the business requirements process or that are legislatively mandated. This new application will comply with State of Michigan Department of Information Technology development standards and Tribal-State-U.S. Environmental Protection Agency (USEPA) Exchange Network data standards, design rules, and conventions as further described below.

The SOM seeks to have services by 9/30/2008. The SOM will assign a Project Manager to represent MDIT and MDEQ on this project. This Project Manager is the only person authorized to accept or reject work performed by the contractor. This project manager will be referred to as the “MDIT Project Manager”. The MDIT Project Manager will designate a representative to assist with the managing of the day to day operations of the project but only the MDIT Project Manager has the authority to approve or accept work by the Contractor.

#### **1.002 Background**

MAERS is one of MDEQ Air Quality Division’s (AQD) fundamental applications. It contains annual air emissions from regulated facilities along with detailed source information down to the process level. Approximately 2000 facilities report emissions to this system each year and air quality fees are generated from these reports. It must be replaced due to lack of support of the development software. In addition, it does not comply with current USEPA content and data transfer requirements. The application is in its tenth year of service and, while many new features have been added, there has not been any significant upgrade to the core database model.

The purpose of this project is to develop a web-based application to replace the current system, utilizing a new data model that is compliant with USEPA's National Inventory Format (NIF) and required Exchange Network (EN) standards and conventions. The new application must preserve the functionality defined in the current data entry system, while making the application and information accessible via the Internet. Although the technology will change from a mailed CD to a web-based interface, the screen appearance of the new system shall have the same look and feel as the existing system.

The Regional Air Pollution Inventory Development System (RAPIDS) is the core model on which the current version of MAERS is based. The first part of this project is to upgrade the backend database to convert to the new data model that is being developed by the Great Lakes Commission (GLC) to support RAPIDS-3. This integration will include replacement of all necessary tables, stored procedures, forms, and reports. The database supporting MAERS, Central\_Air, also supports other AQD applications that do not relate directly to the emissions inventory. The references or links to these other applications need to be redirected to the same data in the new data model. These applications include:

- Renewable Operating Permit (ROP) – Toolkit
- Michigan Air Compliance and Enforcement System (MACES)
- Permit Eval Form – New Source Review Permits
- Navision – MDEQ financial and accounting system used for fee invoicing



The second part of this project is to develop a web-based interface for facilities to enter emissions information annually. This includes an internal component to provide MDEQ staff the ability to audit and edit facility data prior to moving it into production, replacing the current "Source Explorer" portion of the Emissions Inventory Toolkit (EI Toolkit). The web-based interface that facilities will use to report their annual emissions to the MDEQ will be insulated from the MDEQ database that contains the production inventory. The external interface will also require secured accounts for each facility.

The third part of the project addresses the ability to exchange facility emissions information with other governmental agencies. Data exchange capabilities must conform to USEPA Exchange Network (EN) standards established for the National Emissions Inventory (NEI). Data will be transferred to USEPA's Central Data Exchange (CDX) and other data users through the MDEQ EN Node.

### **1.100 Scope of Work and Deliverables**

#### **1.101 In Scope**

The Contractor will provide services for the complete and successful new development, conversion of data, and enhancements of the existing Michigan Air Emissions System (MAERS), providing the continued and new functionality required for the SOM's business operations for the MDEQ-AQD. During the maintenance period there may be further enhancements that the SOM requests as provided in Appendix D.

This project consists of the following high-level components:

1. Project Management
2. Business requirements validation and verification
3. Technical requirements validation and verification
4. Design of the replacement system
5. Development of the replacement system including test plan and test scripts
6. Testing of replacement system in test environment
7. Production, load system to production environment, conversion of data
8. Training / Documentation
  - User training and documentation
  - System Administration training and documentation
9. Maintenance and Support
10. Additional enhancements identified through the business requirement process or legislatively mandated

A more complete description of the services for this project is located in Section 1.104, Work and Deliverables.

#### **1.102 Out Of Scope**

Hardware installation or hardware maintenance, security administration within SOM's LAN/WAN networks and desktop support are out of the scope of this Contract.

#### **1.103 Environment**

The links below will provide information on the State's Enterprise IT policies, standards and procedures which includes security policy and procedures, IT strategic plan, eMichigan web development and the State Unified Information Technology Environment (SUITE).

Contractor is expected to conform to State IT policies and standards. All services and products provided as a result of this Contract must comply with all applicable State IT policies and standards in effect at the time the Contract is issued. The Contractor must request any exception to State IT policies and standards in accordance with MDIT processes. It will be the responsibility of the State to deny the exception request or to seek a policy or standards exception.



Contractor is required to review and comply with all applicable links provided below.

**Enterprise IT Policies, Standards and Procedures:**

<http://www.michigan.gov/dit/0,1607,7-139-34305---,00.html>

All software and hardware items provided by the Contractor must run on and be compatible with the MDIT Standard Information Technology Environment. Additionally, the State must be able to maintain software and other items produced as the result of the Contract. Therefore, non-standard development tools may not be used unless approved by MDIT. The Contractor must request, in writing, approval to use non-standard software development tools, providing justification for the requested change and all costs associated with any change. The State's Project Manager and MDIT must approve any tools, in writing, before use on any information technology project.

The Contractor may request, in writing, a change in the standard environment, providing justification for the requested change and all costs associated with any change. Any changes must be approved, in writing, by the State's Project Manager and MDIT, before work may proceed based on the changed environment.

**Enterprise IT Security Policy and Procedures:**

<http://www.michigan.gov/dit/0,1607,7-139-34305-108216--,00.html>

**The State's security environment includes:**

- *MDIT Single Login.*
- MDIT provided SQL security database.
- Secured Socket Layers.
- SecureID (State Security Standard for external network access and high risk Web systems)

MDIT requires that its single - login security environment be used for all new client-server software development. Where software is being converted from an existing package, or a client-server application is being purchased, the security mechanism must be approved in writing by the State's Project Manager and MDIT's Office of Enterprise Security.

Any additional Agency specific security requirements above and beyond the enterprise requirements and standard terms and conditions stated in Article 2 must be provided as part of the Agency Specific Technical Environment.

**IT Strategic Plan:**

<http://www.michigan.gov/dit/0,1607,7-139-30637-135173--,00.html>

**IT eMichigan Web Development Standard Tools:**

[http://www.michigan.gov/documents/Look\\_and\\_Feel\\_Standards\\_2006\\_v3\\_166408\\_7.pdf](http://www.michigan.gov/documents/Look_and_Feel_Standards_2006_v3_166408_7.pdf)

**The State Unified Information Technology Environment (SUITE):**

Includes standards for project management, systems engineering, and associated forms and templates – must be followed:

<http://www.michigan.gov/suite>

**National Environmental Information Exchange Network:**

<http://www.exchangenetwork.net/>

<http://www.exchangenetwork.net>

Current MDEQ MAERS Application Environment – see **Appendix A1 – MDEQ Current MAERS Application Environment.**



## Current MDEQ/MDIT web hosting & network environment – see **Appendix A2 – Application Hosting Services**

Contractors must provide a detailed description of the infrastructure requirements for the software proposed. For example, the database, operating systems (including versions), and hardware required for maximum effectiveness of the software. The description is to include the proposed architecture, technology standards, and programming environment.

### **Project Management Methodology Standards**

The Project Management Methodology (PMM) to be use on all Information Technology (IT) based projects is described at <http://www.michigan.gov/projectmanagement>. The Contractor shall use the State's PPM to manage this Contract. If the Contractor requires training on the PMM, those costs shall be the responsibility of the Contractor, unless otherwise stated.

### **Adherence to Portal Technology Tools**

Unless otherwise stated, Contractor must use the Portal Technology Tools to implement web content management and deployment efforts. Tools used for web-based application development must work in conjunction with Vignette and Inktomi. The interaction with Vignette and Inktomi must be coordinated with DIT, Enterprise Application Services Office, e-Michigan Web Development team. The State has adopted the following tools for its Portal Technology development efforts:

- Vignette Content Management and personalization Tool
- Inktomi Search Engine
- E-Pay Payment Processing Module
- Websphere Commerce Suite for e-Store applications

Contractors that are compelled to use alternate tools must have received an exception from DIT, Enterprise Application Services Office, e-Michigan Web Development team, before this Contract is effective.

#### **1.104 Work And Deliverable**

**This section includes:**

- I. Requirements (technical, functional and service levels);
- II. Services (work) To Be Provided and Deliverables

#### **I. Requirements**

- A. Functional Requirements – see **Appendix B**
- B. Service Level Requirements - see **Appendix C**

#### **II. Services (work) To Be Provided and Deliverables**

##### **1. Six Phases of Work and Deliverables:**

There are six phases for the work and deliverables on this project. Each of these phases has a corresponding milestone payment for each phase. [Training, maintenance and future enhancements are priced and paid for separately from these six phases.] Upon the conclusion of each phase and the submission of all deliverables required in the phase, the MDIT Project Manager will provide written acceptance if all the work and deliverables have been satisfactorily completed. The contractor may, after receipt of such acceptance, submit an invoice for the milestone payment associated with the completed phase. The contractor may commence work on the subsequent phase after acceptance of the prior phase. For the purposes of the initial project schedule submitted with the proposal, the contract should include ten work days for reviews by the SOM. In the event that the work and deliverables are not acceptable to the MDIT Project Manager the contractor shall correct the issues noted and re-submit by a date as directed by the MDIT Project Manager.



## **Phase I Project Planning**

### **a. The Work and Deliverables for Project Planning:**

Planning the project work, a kick-off meeting and development of the planning documents.

The deliverables for this phase are as follows:

1. Project plan
2. Project schedule

### **b. The Contractor's Responsibilities for Project Planning:**

Conduct one (1) face-to-face project kickoff meeting in Lansing with SOM MDEQ and MDIT staff representatives.

Develop the Project Plan including the communications plan, the quality management plan, the change management plan, the procurement plan, the risk management plan and a staffing plan. The project plan will also provide an estimate of hours and timing of work required of SOM staff for this project. See sections 1.401, 1.402, 1.403, and 1.103 for further information.

Produce a Project Schedule, including a Gantt chart, with all work steps related to the services provided in the six phases plus training defined in this section. While the contract could remain open for three years plus possible time extensions, we anticipate that the design, development, testing, and production implementation, as defined in the six phases, will take no longer than two years.

For the purposes of the initial project schedule that is provided with the proposal, the contractor should include ten work days for the various reviews by the SOM, except for the review and acceptance of the system design, the schedule should include 20 work days for the review. These may be adjusted as agreed upon between the contractor and the MDIT Project Manager.

Host conference calls, facilitate discussion and issue minutes of conference calls & meetings and provide weekly project status reports.

### **c. The SOM's Responsibilities for Project Planning:**

- Assign a Project Manager to represent MDIT and MDEQ on this project. This Project Manager is the only person authorized to accept or reject work performed by the contractor. This project manager will be referred to as the "MDIT Project Manager".
- The MDIT Project Manager will identify a team of program experts.
- The MDIT Project Manager will establish goals and objectives for the system implementation.
- The MDIT Project Manager will coordinate SOM resources needed, including designated trainers and acceptance testers.
- The MDIT Project Manager provide work/meeting area during the Contractor site visits.
- The MDIT Project Manager will define project standards and controls required by the SOM.
- Attend project kickoff meeting.
- Identify delivery locations and training locations.
- Project closeout procedures.

### **d. Acceptance Criteria for Phase I Project Planning**

The contractor shall submit the following to the MDIT Project Manager:

1. project plan
2. project schedule



If these documents are in accordance with SUITE see section 1.103, and acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance. The Contractor shall not commence work on Phase II until they have received written acceptance from the MDIT Project Manager of all deliverables required under Phase I.

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

## **Phase II Requirements Verification and Validation**

### **a. The work and deliverables for Requirements Verification and Validation**

Appendices B & C are intended to represent a starting point for the contractor in the development of the new MAERS system. These lists are to be validated to determine if there are further functional requirements necessary for the new MAERS system, including enhancements. This process should include the analysis of required import and export of data from MAERS to and from other systems.

The deliverables for this phase are as follows:

1. Business Requirements Document – A detailed description of the business requirements of the proposed new system based on the contractor's analysis of the existing system, and the functional requirements identified in Appendix B.
2. Requirements Traceability Matrix
3. Technical Requirements Documents - A detailed description of the technical requirements of the proposed new system including a description of the software, hardware, hosting, back-up and disaster recovery, and interaction with the SOM Network. In instances where multiple options are considered, the document should include a cost benefit analysis of each alternative.
4. Updated project plan and schedule.

### **b. The Contractor's Responsibilities for Requirements Verification and Validation**

The contractor will hold Joint Application Development (JAD) sessions to verify and validate the documentation on the current system and to document potential enhancements for the new system.

It is critical that the contractor properly identify and analyze the needed reporting requirements of the new system and the interaction of the new system with other systems. Examples of the systems that the new MAERS system will need to interact with are: ROP-Toolkit, MACES, Permit Eval Form, and Navision. An example of a data exchange reporting requirement is between MAERS and USEPA NEI through the Central Data Exchange (CDX).

Review the documents on MDEQ's Central Air database, business processes and related requirements, (including MDEQ AQD organizational structure, AQD program staff roles & responsibilities, data elements, USEPA reporting requirements, etc.) and update where necessary.

The contractor is to update the project plan to include a work plan for the design effort.



The contractor is to update the project schedule to more fully define the design effort and to include multiple review sessions wherein the contractor will demonstrate their progress on the design of the new MAERS application.

**c. The SOM's Responsibilities for Requirements Verification and Validation**

- Coordinate SOM resources needed.
- Provide work area for contractor's staff when on site.
- Provide conference rooms for JAD sessions.
- Define project standards and controls required by the SOM.
- The MDIT Project Manager and program area subject matter experts will participate in the JAD sessions.
- The MDIT Project Manager will solicit comments from the stakeholders on the business and technical requirements considered during this phase.

**d. Acceptance Criteria for Phase II Requirements Verification and Validation**

The contractor shall submit the following to the MDIT Project Manager:

1. Business Requirements Document
2. Requirements Traceability Matrix
3. Technical Requirements Documents
4. Updated Project Plan
5. Updated Project Schedule

If these documents and their content are acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance. The Contractor shall not commence work on Phase III until they have received written acceptance from the MDIT Project Manager of all deliverables required under Phase II.

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

**Phase III Design of the New System**

**a. The work and deliverables for Design of the New System**

Design of the new MAERS system in accordance with the Business Requirements Document and the Technical Requirements Document that were developed during Phase II and as accepted by the MDIT Project Manager. The design must be divided into the three project parts identified in the functional requirements (Appendix B), however, integration of the parts must also be described.

This design will include a detailed description of the functioning of the new system, the software and hardware to be used and the connectivity to others systems or data bases. The following list is to be considered indicative but not all inclusive of the subjects covered by the system design:

- Mock-ups of all screens including their functionality.
- A list and mock-up of all output reports.
- A description of the table structure including a list of all fields in each table.
- A description of all data flows to and from the new system including the output to desktop software such as Excel.

During the design phase the contractor is to develop a training plan that incorporates the requirements stated in part 2 of this section.



The deliverables for this phase are as follows:

1. Design document
2. Work breakdown structure
3. Updated project plan
4. Updated project schedule
5. The contractor's certification that quality assurance and quality control has been performed in accordance with the quality management plan.
6. The Training Plan including the training schedule.
7. Hardware configuration recommendations and estimates

**b. The Contractor's Responsibilities for Design of the New System**

The contractor is to design the new MAERS system and produce the design document. One week after the commencement of work on the design the contractor shall provide a complete Work Breakdown Structure (WBS) of the design effort. This WBS shall show assignments of staff as of that time. The WBS shall be updated for material changes. Changes in staff assignments are considered material.

During the design phase of the project, the contractor shall include, within the weekly status reports, a statement that the project is on schedule or provide a proposed revised schedule. Each status report is to list any decisions or data that the contractor is waiting for from the SOM or if there is not anything that the contractor is waiting for the status report is to so state. The contractor shall also include other subjects as may be added by the MDIT Project Manager.

The contractor shall update the project plan to include a work plan for the development effort.

The contractor shall develop an overall training plan according to the requirements in part 2 of this section including the sub-plans mentioned therein. The training plan will include detailed information on the training curriculum, training schedule and documentation as further defined in part 2 of this section.

**c. The SOM's Responsibilities for Design of the New System**

Monitoring and oversight of the design work by the contractor.

Answer questions and providing information when requested by the contractor

To review any interim deliverables as may be agreed to between the MDIT Project Manager and the Contractor's Project Manager.

To provide access to SOM specialists, such as security and network, when requested by the contractor and as agreed to by the MDIT Project Manager.

**d. Acceptance Criteria for Phase III Design of the New System**

The contractor shall submit the following to the MDIT Project Manager:

1. Design Document
2. Work Breakdown Structure
3. Updated Project Plan
4. Updated Project Schedule (if applicable)
5. The contractor's certification that quality assurance and quality control has been performed in accordance with the quality management plan.
6. The Training Plan including the training schedule.
7. Hardware configuration recommendations and estimates.



If these documents are acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance. The Contractor shall not commence work on Phase IV until they have received written acceptance from the MDIT Project Manager of all deliverables required under Phase III.

If a product and/or the documentation is not acceptable to the MDIT Project Manager, the SOM shall give the Contractor written notice stating why the product is unacceptable. The Contractor shall have twenty (20) business days from the receipt of such notice to correct the deficiencies. The SOM shall then have twenty (20) business days to inspect, test and reevaluate the product. If the product and documentation still does not satisfy the acceptance criteria, the SOM shall have the option of either: (1) repeating the procedure set forth above, or (2) terminating this Contract pursuant to the section of this Contract entitled "Termination."

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

#### **Phase IV Development of the New System**

##### **a. The work and deliverables for Development of the New System**

Development of the new MAERS System in accordance with the Design Document that was developed during Phase III and as accepted by the MDIT Project Manager. The new system will be documented in a development document.

Development of a test plan to test the new system in the test environment, and a conversion test wherein the current active data base will be test loaded into the new system in the test environment. The test plan will include user acceptance testing by MDIT and MDEQ staff using test scripts developed by the contractor and approved by the MDIT Project Manager.

The deliverables for this phase are as follows:

1. Development Document including:
  - a. The source code
  - b. The conversion program
2. Test Plan including Test Scripts
3. The contractor's certification that quality assurance and quality control has been performed in accordance with the quality management plan.
4. Updated Project Plan
  - a. Production startup plan
5. Updated Project Schedule (if applicable)

##### **b. The Contractor's Responsibilities for Development of the New System**

The contractor is to perform the development of the new MAERS system and produce the development document. One week after the commencement of work on the development, the contractor shall provide a complete work breakdown structure (WBS) of the development effort. This WBS shall show assignments of staff as of that time. The WBS shall be updated for material changes. Changes in staff assignments are considered material.

Within the first week of the development, the contractor is to update the project schedule to more fully define the development effort and to include multiple review sessions wherein the contractor will demonstrate their progress on the development of the new MAERS system.

The contractor will provide access to source code as it's being developed to allow SOM staff to review the code in accordance with coding and development standards. Within ten days of the development phase, the contractor shall provide a plan and schedule for the availability of the source code for review by the SOM staff.



During the development phase of the project, the contractor shall include, within the weekly status reports, a statement that the project is on schedule or provide a proposed revised schedule. Each status report is to list any decisions or data that the contractor is waiting for from the SOM or if there is not anything that the contractor is waiting for the status report is to so state. The contractor shall also include other subjects as may be added by the MDIT Project Manager.

The contractor shall work with SOM database and web hosting teams to define the configuration of the test and production environments.

As the development of the new system progresses, the contractor shall verify that the production system specifications in the phase II technical requirement document are still correct.

The contractor shall develop the source code for the new MAERS system such that the system is able to perform the functions as defined in Phase II and incorporated in the design in Phase III. This code is to be written, organized and documented in accordance with accepted industry standards or as superseded by MDIT. The contractor shall provide two paper copies and one electronic copy of the development document which details the code and describes the function each segment of code is performing and describes the operation of the code. The documentation shall include Entity Relationship diagrams, behavior, interaction and structure diagrams following the UML 2 standard, and a description of roles-based security implementation.

The contractor will conduct structured walkthroughs of deliverables for this phase with MDIT staff.

The contractor will develop a written test plan. This test plan will detail the test methodology and methods to be used to monitor the tests and will include a schedule of the planned testing. At a minimum, the testing is to include the following types of tests:

1. Unit testing involves testing every function individually and this will be done by the contractor prior to submitting the source code to the SOM to test.
2. System Testing involves validating that all of the functions work in unison and this will also be done by the contractor prior to submitting code to the SOM to test and the SOM may want to validate the system testing.
3. All changes shall result in testing the entire system (regression testing) to be sure all software functionality is maintained.
4. Stress Testing involves testing application procedures and functions with the appropriate data load to ensure that the response time is within standards.
5. Integration Testing to ensure that the components of the system work properly together.
6. Before testing is considered complete, the system must run for 30 days without defects. If there are any defects, the contractor will address them and the 30 day window starts again.
7. The data flow will be tested using the USEPA CDX test client and other available testing mechanisms. These tests will evaluate the flow operations and the correctness of the submitted XML documents. Once local testing has been completed, test submissions will be sent to USEPA via CDX for testing and evaluation by the USEPA NEI Team.

The contractor will develop a conversion program to convert the data in the current active data base so that it matches the data structure of the data base in the new MAERS system.

The contractor will develop test scripts that will thoroughly test the workings of the new MAERS system. In addition to testing every different type of transaction that the system would encounter in the normal course of business, the test scripts shall include the incorrect transactions that the system is designed to reject.



**c. The SOM's Responsibilities for Development of the New System**

Monitoring and oversight of the development work by the contractor.

Answer questions and providing information when requested by the contractor.

Review any interim deliverables as may be agreed to between the MDIT Project Manager and the Contractor's Project Manager.

SOM staff will review the source code in accordance with coding and development standards as it is being developed.

Participate in structured walkthroughs of deliverables for this phase.

Participate in the development of test plans and scripts.

Provide access to SOM specialists, such security and network, when requested by the contractor and as agreed to by the MDIT Project Manager.

**d. Acceptance Criteria for Phase IV Development of the New System**

The contractor shall submit the following to the MDIT Project Manager:

1. Development Document including:
  - a. The source code
  - b. The conversion program
2. Test Plan including Test Scripts
3. The contractor's certification that quality assurance and quality control has been performed in accordance with the quality management plan.
4. Updated Project Plan
5. Updated Project Schedule (if applicable)

If these documents are acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance. The Contractor shall not commence work on Phase V until they have received written acceptance from the MDIT Project Manager of all deliverables required under Phase IV.

If the product and/or the documentation is not acceptable to the MDIT Project Manager, the SOM shall give the Contractor written notice stating why the product is unacceptable. The Contractor shall have twenty (20) business days from the receipt of such notice to correct the deficiencies. The SOM shall then have twenty (20) business days to inspect, test and reevaluate the product. If the product and documentation still does not satisfy the acceptance criteria, the SOM shall have the option of either: (1) repeating the procedure set forth above, or (2) terminating this Contract pursuant to the section of this Contract entitled "Termination."

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

**Phase V Testing of the New System**

**a. The work and deliverables for Testing the New System**

The contractor will test the new MAERS system in accordance with the test plan and schedule.

The contractor will establish and maintain a method for logging of all reported issues and their resolutions that is easily searchable.



The contract will produce a test results document which records the tests events, the dates of the events, the test results and analysis of the results.

The deliverables for this phase are as follows:

- Test results document

**b. The Contractor's Responsibilities for Testing the New System**

Prior to commencement of testing the contractor will conduct a meeting with appropriate SOM staff in order to orient SOM staff on the test methodology and schedule. Due to the multiple responsibilities of SOM specialists it is critical that the contractor establish a detailed test schedule and that, once it is approved by the MDIT Project Manager, they strictly adhere to that schedule.

The contractor will conduct the test of the new system in accordance with the approved test plan and the test schedule. All tests will be conducted in the presence of the MDIT Project Manager or other person(s) as designated by the MDIT Project Manager.

All changes shall result in testing the entire system (regression testing) to be sure all software functionality is maintained. The contractor shall prepare script so that uniform system wide testing can be done in an efficient manner.

The contractor will fully document the tests including a record of any test errors or anomalies. Errors will be reviewed to determine root cause and corrective action. The Contractor is responsible to correct the problem and request a re-test until the SOM is satisfied with the results. This review, its results, corrective action and re-test will be recorded in the test document.

During the testing phase of the project, the contractor shall include, within the weekly status reports, a summary of the test results during the test period, the planned test for the upcoming period and a statement that the project is on schedule or provide a proposed revised schedule. Each status report is to list any decisions or data that the contractor is waiting for from the SOM or if there is not anything that the contractor is waiting for the status report is to so state. The contractor shall also include other subjects as may be added by the MDIT Project Manager.

The Contractor will coordinate with the MDIT Project Manager to set up the application in the test environment. Final quality assurance acceptance testing must be performed at the SOM hosting center and will mirror the SOM production environment. During testing, the SOM and the Contractor will work together to measure response time. The Contractor will make improvements to the application until the SOM is satisfied with the response time, as defined in Appendix C – Requirement #2 of Service Level Agreements (SLA).

The Contractor will work with the SOM to test the backup and disaster recovery processes.

**c. The SOM's Responsibilities for Testing the New System**

The SOM will provide examples of data in the current system in order to assist the contractor in producing test data to enter into the data base during the test of the new system. Such example data may be altered in order to obscure the actual names and places.

Monitoring and oversight of the test work by the contractor.

Answer questions and providing information when requested by the contractor.



To provide access to SOM specialists, such security and network, when requested by the contractor and as agreed to by the MDIT Project Manager.

Validate system installation on test and production environments.

Perform user acceptance testing.

The MDIT Project Manager will assemble the test team and in coordination with the contractor, the test team will conduct acceptance testing.

The MDIT Project Manager will coordinate server access needed for testing and production environments.

**d. Acceptance Criteria for Phase V Testing the New System**

The contractor shall submit the following to the MDIT Project Manager:

- Test results document

If this document, and its contents, is acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance. The Contractor shall not commence work on Phase VI until they have received written acceptance from the MDIT Project Manager of all deliverables required under Phase V.

If the product and/or the documentation is not acceptable to the MDIT Project Manager, the SOM shall give the Contractor written notice stating why the product is unacceptable. The Contractor shall have twenty (20) business days from the receipt of such notice to correct the deficiencies. The SOM shall then have twenty (20) business days to inspect, test and reevaluate the product. If the product and documentation still does not satisfy the acceptance criteria, the SOM shall have the option of either: (1) repeating the procedure set forth above, or (2) terminating this Contract pursuant to the section of this Contract entitled "Termination."

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

**Phase VI Placing the New System in Production**

**a. The work and deliverables for the New System in Production**

The new MAERS system will be loaded onto the production and the disaster recovery platforms. The data in the current system will be converted and loaded onto those two same systems.

The new MAERS system will be run in the production environment for a six month period that includes one reporting cycle (December through May) to verify that it performs in accordance with the specifications of the design and development documents.

The contractor and the SOM staff will monitor the new MAERS system during the six month production run.

A performance log will be maintained during this production run.

The deliverables for this phase are as follows:

- Performance Log for the six month production period.



**b. The Contractor's Responsibilities for the New System in Production**

The contractor will conduct planning meetings with appropriate SOM staff regarding production, hosting and the database.

In coordination with SOM specialists, the contractor will load the new system into the production environment in accordance with the approved development document.

In coordination with SOM specialists, the contractor will convert the data in the current system to match the format of the new system and then load the data in the new system.

The contractor will monitor the new MAERS system for a six month production run (one reporting cycle – see (a) above). The contractor will document the performance of the system in a performance log. The performance log will record the following:

- Production volume
- Load balancing
- Response time
- Up time and down time of the MAERS system
- System errors in data entry
- Errors in data transmission
- The functioning of screens and reports
- Analysis of errors and corrective action taken
- Dates of these event

A copy of the performance log for the prior week shall be provided to the MDIT Project Manager each week.

**c. The SOM's Responsibilities for the New System in Production**

Monitoring and oversight of the production run in coordination with the contractor.

Answer questions and providing information when requested by the contractor

To provide access to SOM specialists, such security and network, when requested by the contractor and as agreed to by the MDIT Project Manager.

To provide access to SOM facilities and equipment that is necessary to the production run of the new MAERS system.

**d. Acceptance Criteria for Phase VI the New System in Production**

The contractor shall submit the following to the MDIT Project Manager:

- Performance Log for the six month production period.

If the new MAERS system's performance is acceptable to the MDIT Project Manager, the MDIT Project Manager will provide written acceptance of the MAERS system.

At any time during the six month production run, the new MAERS system's performance or the performance log are not acceptable to the MDIT Project Manager; the SOM shall give the Contractor written notice stating why the product is unacceptable.

The Contractor shall have twenty (20) business days from the receipt of such notice to correct the deficiencies. The SOM shall then have twenty (20) business days to inspect, test and reevaluate the product. If the product and documentation still does not satisfy the acceptance criteria, the SOM shall have the option of either: (1) repeating the procedure set forth above, or (2) terminating this Contract pursuant to the section of this Contract entitled "Termination."



In the event that the performance of the new MAERS system is found unacceptable at any time during the six month production run and the contractor corrects the cause of the unacceptable performance, the MDIT Project Manager may accept the correction and elect to resume the production test run. If the production failure cannot be duplicated during this same period, the Contractor shall provide an alternative testing methodology that is satisfactory to the MDIT Project Manager. In the event that the contractor is not able to provide an alternative testing methodology that is satisfactory to the MDIT Project Manager, then the production test period will continue for an additional twelve months to include a complete reporting cycle.

Upon receipt of the MDIT Project Manager's written acceptance of a phase the contractor may submit an invoice for the milestone payment associated with that phase.

The maintenance period begins upon final written acceptance of the MAERS system.

## 2. **Training and Documentation**

The contractor shall conduct MAERS System user training and provide documentation in accordance with the training plan with the training schedule approved by the MDIT Project Manager.

### a. **Contractor's Responsibilities for Training and Documentation**

- Provide training (preferably on-line) and electronic manuals for the MDIT and area experts. This could be up to 12 staff trained over a two-day period using either on-site or Webex-type teleconference options.
- MAERS data submittal End User training sessions and applicable documents. This will include development of on-line documentation needed to allow industry users the ability to electronically submit required emissions data to MDEQ. Documentation and training will also be provided via either on-site demonstrations or an online Webex-like option to MDEQ program staff to ensure their ability to exchange emissions data between AQD and USEPA's NEI System.
- Web hosting and database system administration training for SOM MDIT personnel who will be responsible for ongoing maintenance and administration of the system, including network and system security.

### b. **SOM Staff Responsibilities Training and Documentation**

- The MDIT Project Manager will identify MDEQ MAERS area experts to be trained.
- The MDIT Project Manager will identify MDIT technical staff to be trained.
- Provide feedback on training documentation.
- Provide and schedule training rooms.

### c. **Deliverables for MAERS System User Training** – Note: All training manuals, training plans and other documentation provided as deliverables become the property of the SOM.

- Training plan for MDIT/MDEQ MAERS Project Coordinators, area experts, and MAERS system administrators.
- Training sessions for MDIT/MDEQ MAERS Project Coordinators, area experts and MAERS system administrators.
- Updated MAERS Technical documents including published Database scripts.
- MAERS APIs listing properties, methods, input and output parameters, detailed ERD, Use Cases and any documentation describing the process and data flows.
- MAERS End User training sessions for data submittals and applicable documents.



**d. Acceptance Criteria for Conducting MAERS System User Training:**

Review and approval by the MDIT Project Manager, including program area experts and SOM IT staff experts (web hosting, etc.) followed by sign-off by the MDIT Project Manager prior to agreement to reimburse.

**2.1 Training and Transition to MDIT Support**

This deliverable includes a technical training plan, training and technical knowledge transfer of the system production technical operations and maintenance to MDIT staff for MDIT hosting support. This plan is a critical component for successful completion of the training.

The Technical Training Plan shall be based on a Training Needs Analysis. This analysis shall include an assessment of the MDIT target audience: their knowledge, skills and readiness for training.

The Technical Training Plan must contain the following:

1. A description of how the contractor will prepare MDIT staff to assume responsibility for supporting the SOM production system hosting including required MDIT roles and skills that will be needed. The Plan must also include the Contractor roles and responsibilities.
2. A plan and work breakdown schedule (WBS) that specifies SOM resources required and specific high level tasks for the training and knowledge transfer.
3. The training and knowledge transfer should begin for quality assurance testing must be completed 60 days before the system is released for production use.

Documentation must include:

- Complete system documentation.
- User manuals (administrator and authorized user).
- Training manuals.
- Glossary.

**2.2 Training and Transition to future MDIT Full Support**

The contractor will assist with transition for MDIT to assume full responsibility to support the solution by an agreed upon date before the contract expires. The contractor will perform maintenance and enhancement activities, and at the same time train the MDIT staff to gradually take over full support for the activities. The contractor will continue to assist MDIT as MDIT assumes responsibility for activities. The contractor will develop a transition and training plan to be agreed upon with the SOM.

- a. The contractor will follow the approved Project Schedule to complete transition to the SOM by the agreed upon timeframe.
- b. Provide thorough documentation that will be necessary for MDIT staff to take over full responsibility for the system maintenance, enhancement and support processes.
- c. Develop a technical training plan for MDIT staff to be agreed upon by MDIT and contractor.
  - The training plan shall cover all aspects of the systems and processes necessary to provide stable, efficient and reliable maintenance and enhancement support for the systems.
  - Conduct training for MDIT staff necessary to complete the technical knowledge transfer including execution of processes in a test scenario environment.
  -
- d. Documentation shall include:
  - Complete system documentation.
  - User manuals (administrator and authorized user).
  - Training manuals.
  - Glossary.



### 3. Maintenance and Support

The contractor will provide replacement copies, patches, or corrective services to correct any error, malfunction or defect in the MAERS system.

Maintenance does not include professional services to modify, customize or enhance software functionality to meet specific SOM business requests.

The maintenance period will commence upon the completion of the six month production run and final acceptance of the system by the MDIT Project Manager.

### 4. Future Enhancements

The contractor shall commit to providing professional services to implement enhancements for the duration of the contract as it may be amended. The contractor shall commit to provide personnel in the staffing categories shown in Appendices D

Future enhancements shall be implemented as follows: The SOM will prepare a statement of work that describes the enhancement and present this to the contractor. The contractor will respond with a proposal of their work plan to implement the enhancement and the number of hours by staffing category to carry out that work. The SOM will review the proposal and if acceptable will issue a purchase order for the work.

#### Statements of Work

- (a) The parties agree that the Services/Deliverables to be rendered by Contractor pursuant to this Contract (and any future amendments of it) will be defined and described in detail in Statements of Work or Purchase Orders (PO) executed under this Contract. Contractor shall not be obliged or authorized to commence any work to implement a Statement of Work until authorized via a PO issued against this Contract, or an amendment to this Contract (see 2.106). Contractor shall perform in accordance with this Contract, including the Statements of Work/Purchase Orders executed under it.
- (b) Unless otherwise agreed by the parties, each Statement of Work (as defined in Article 1) will include, or incorporate by reference to the appropriate Contract Article 1 Attachment containing, the following information:
  - ⇒ a description of the Services to be performed by Contractor under the Statement of Work;
  - ⇒ a project schedule (including the commencement and completion dates for all tasks, subtasks (for all projects of sufficient duration and complexity to warrant sub task breakdown), and Deliverables;
  - ⇒ a list of the Deliverables to be provided, if any, including any particular specifications and acceptance criteria for such Deliverables, and the dates on which the Deliverables are scheduled to be completed and delivered to the State;
  - ⇒ all Deliverable price schedules and other charges associated with the Statement of Work, the overall fixed price for such Statement of Work and any other appropriate pricing and payment terms;
  - ⇒ a specification of Contractor's and the State's respective performance responsibilities with respect to the performance or completion of all tasks, subtasks and Deliverables;
  - ⇒ a listing of any Key Personnel of Contractor and/or its Subcontractors for that Statement of Work and any future Statements of Work;
  - ⇒ any other information or provisions the parties agree to include.
- (c) The initial Statements of Work, as of the Effective Date, are attached to this Contract.



## **1.200 Roles and Responsibilities**

### **1.201 Contractor Staff, Roles and Responsibilities**

#### **A. Contractor Staff See Section 2.062 Contractor Key Personnel**

#### **B. On Site Work Requirements**

##### 1. Location of Work:

The work is to be performed, completed, and managed as follows: The Contractor will work out of their office. The SOM will provide workspace (work space, telephone, and access to a printer, copier, and fax machine) for the Contractor when on site at SOM offices. The MAERS application is hosted in Lansing where the installation and testing is to occur.

##### 2. Hours of Operation:

- a. Normal SOM working hours are 8:00 a.m. to 5:00 p.m. EST, Monday through Friday, with work performed as necessary after those hours to meet project deadlines. No overtime will be authorized or paid.
- b. The SOM is not obligated to provide SOM management of assigned work outside of normal SOM working hours. The SOM reserves the right to modify the work hours in the best interest of the project.
- c. Contractor shall observe the same standard holidays as SOM employees. The SOM does not compensate for holiday pay.

#### **C. Travel:**

No travel or expenses are anticipated for this project. All anticipated work-related travel is to be included in the total project bid estimate. Likewise, travel time will not be reimbursed.

#### **D. Additional Security and Background Check Requirements:**

Contractor must present certifications evidencing satisfactory Michigan State Police Background checks (ICHAT) and drug tests for all staff identified for assignment to this project.

Contractor will be responsible for any costs associated with ensuring their staff meets all requirements.

### **1.202 State Staff, Roles, And Responsibilities**

The SOM project team will consist of an Executive Subcommittee (ESC) comprised of the following:

- MDIT Project Manager
- MDIT Subject Matter Expert (SME)
- MDEQ-AQD - Assistant Division Chief;
- MDEQ-AQD - Chief of Administrative Services Section - project support;
- MDEQ-AQD - Project Coordinator;
- MDEQ-AQD - SME
- MDEQ-EXE - Project Coordinator

As of the effective date for contract commencement the MDEQ-AQD Project Coordinator shall be the supervisor of the Emissions Reporting and Assessment Unit. The MDEQ AQD MAERS Subject Matter Expert (SME) will be identified prior to or at the project kickoff meeting.

The MDEQ-EXE Project Coordinator will be Michael Beaulac.

The MDIT is the project co-sponsor and their project manager will assist the MDEQ-AQD Project Coordinator and SME and the MDEQ-EXE Project Coordinator. The MDIT will be responsible for the SOM's infrastructure and work together with the Contractor in determining the system configuration. The MDIT Project Manager and the MDIT SME will be identified prior to or at the project kickoff meeting.



The ESC shall be available on an as needed basis. They will be solicited for decisions by the MDEQ-AQD and MDEQ-EXE Project Coordinators when there is a need to:

- Resolve project issues in a timely manner
- Review project plan, status, and issues
- Resolve deviations from project plan
- Utilize change control procedures

The MDEQ-AQD and MDEQ-EXE Project Coordinators will provide the following services in cooperation with the MDIT Project Manager:

- Submit the adjustments in response to legislative or outside agency directives to the Contractor
- Provide SOM facilities, as needed
- Coordinate the SOM resources necessary for the project
- Facilitate communication between different SOM departments/divisions
- Milestone and deliverables acceptance and sign-off, with cooperation and approval of the MDIT project manager
- Resolution of project issues
- Escalation of outstanding/high priority issues to the ESC
- Utilize change control procedures
- Conducting regular and ongoing review of the project to confirm that it meets original objectives and requirements
- Documentation and archiving of all important project decisions
- Arrange, schedule and facilitate SOM staff attendance at all project meetings
- Distribution of all documentation, where necessary, to MDEQ-AQD and other agencies, such as MDIT (i.e., MDIT Project Manager).

In addition, the following SOM personnel/resources may be required at stages of the project. The Contractor's Project Manager will make every effort to provide the SOM with advance notice of when those services may be required.

- Systems Analyst
- Application Administrator
- User Implementation Coordinator
- Network Administrator
- Remote access to test and production database environment

### **1.203 Other Roles And Responsibilities (Reserved)**

## **1.300 Project Plan**

### **1.301 Project Plan Management**

#### **A. Project Control**

1. The Contractor will carry out this project under the direction and control of the Department of Information Technology and the Department of Environmental Quality.
2. Within thirty (30) working days of the award of the Contract, the Contractor will submit to the MDIT Project Manager and MDEQ-AQD Project Coordinators for final approval of a work plan.
  - a. This Project plan must be in agreement with section 1.104 Work and Deliverables, and must include the following:
    - i. Necessary substitutions due to change of employment status and other unforeseen circumstances may only be made with prior written approval of the MDIT Project Manager.



3. The Contractor will manage the project in accordance to the SOM's SUITE). See section 1.103 for more information. The SOM's SUITE templates are available for use by the Contractor and contain an approved format for use in project control and reporting. The MDIT and MDEQ project staff will consider substitutes to these templates.
  1. The Contractor shall use an automated tool such as MS Project for planning, monitoring, and tracking the Contract's progress and the level of effort of any Contractors personnel spent performing Services under the Contract.
  2. The Contractor shall use automated project management tools, as reasonably necessary, in order to perform the cited Services, which shall include, through the end of the Contract, the capability to produce:
    - i. Staffing tables with names of personnel assigned to Contract tasks.
    - ii. Project plans showing tasks, subtasks, deliverables, and the resources required and allocated to each (including detailed plans for all Services to be performed within the next sixty (60) calendar days, updated semi-monthly).
    - iii. Updates must include actual time spent on each task and a revised estimate to complete.
    - iv. Graphs showing critical events, dependencies and decision points during the course of the Contract.
  3. Any tool(s) used by the Contractor for such purposes must produce information of a type and in a manner and format that will support reporting in compliance with the SOM's SUITE standard.

### **1.302 Reports**

Reporting formats must be submitted to the MDIT Project Manager for approval within 30 business days after the effective date of the contract. The SOM's SUITE Templates are available for use on this contract by the Contractor that contains the format for project management information that is required. Once both parties have agreed to the format of the report, it shall become the standard to follow for the duration of the contract. The reporting format may include the following:

- Summary of activity during the report period
- Accomplishments during the report period
- Deliverable status
- Schedule status
- Action Item status
- Issues
- Change Control
- Repair status
- Maintenance Activity

### **1.303 Meetings**

Contractor shall prepare and circulate an agenda sufficiently in advance of each such meeting to give participants an opportunity to prepare for the meeting. Contractor shall incorporate into such agenda items that the State desires to discuss. At the State's request, Contractor shall prepare and circulate minutes promptly after a meeting.

#### **A. Orientation Meeting**

1. Within 30 calendar days from execution of the Contract. The Contractor will be required to attend a kick-off meeting to discuss the content and procedures of the Contract.
2. The meeting will be held in Lansing, Michigan, at a date and time mutually acceptable to the SOM and the Contractor.
3. The SOM shall bear no cost for the time and travel of the Contractor for attendance at the meeting.



## **B. Performance Review Meetings**

4. The SOM will require the Contractor to attend monthly meetings, at a minimum, to review the Contractor's performance under the Contract. Such meetings can be conducted via conference call.
5. Onsite meetings will be held in Lansing, Michigan, or by teleconference, as mutually agreed by the SOM and the Contractor
6. The SOM shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

### **1.400 Project Management**

#### **1.401 Issue Management**

An issue is an identified event that if not addressed may affect schedule, scope, quality, or budget. The Contractor shall maintain an issue log for issues relating to the provision of services under this Contract. The issue management log must be communicated to the MDIT Project Manager on an agreed upon schedule, with email notifications and updates. The issue log must be updated and must contain the following minimum elements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue.
- Priority for issue resolution (to be mutually agreed upon by the SOM and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date
- Resolution description

#### **1.402 Risk Management**

A risk is an unknown circumstance or event that, if it occurs, may have a positive or negative impact on the project. The Contractor is responsible for establishing a risk management plan and process, including the identification and recording of risk items, prioritization of risks, definition of mitigation strategies, monitoring of risk items, and periodic risk assessment reviews with the SOM.

The risk management plan will be developed during the initial planning phase of the project, and be in accordance with the SOM's SUITE methodology. Once both parties have agreed to the content of the plan, it shall become the standard to follow for the duration of the contract. The plan must be updated as agreed upon.

The Contractor shall provide the tool to track risks. The Contractor will work with the SOM and allow input into the prioritization of risks. The Contractor is responsible for identification of risks for each phase of the project. Mitigating and/or eliminating assigned risks will be the responsibility of the Contractor. The SOM will assume the same responsibility for risks assigned to them.

#### **1.403 Change Management See section 2.024 Change Requests**

### **1.500 Acceptance**

#### **1.501 Criteria**

The following criteria will be used by the State to determine Acceptance of the Services and/or Deliverables provided under this SOW.

See the Acceptance Criteria identified in Section 2.082, 2.083, 1.104, Work and Deliverables for the six Phases of the project. Acceptance Criteria is based upon the work agreed upon and the plan(s) developed for the work.



### **1.502 Final Acceptance**

Final acceptance is expressly conditioned upon completion of all deliverables and/or milestones, completion of all tasks in the project plan as approved, completion of all applicable inspection and/or testing procedures, and the certification by the MDIT Project Manager that the Contractor has met the defined requirements.

### **1.600 Proposal Pricing**

The contractor agrees to abide by the **Costs Tables** in **Appendix D** of the proposal for all pricing information.

The Contractor's pricing includes a breakdown of all proposal costs along with a brief narrative explaining each cost basis as follows:

- a. Purchase costs
- b. Licensing costs
- c. The costs associated with the services required in section 1.104. These costs shall include work hours and other costs broken down by the activities detailed in section 1.104.
- d. Start-up and Initialization - Consist of all preliminary, one-time costs to the SOM including, but not limited to, investigative, set-up, system initialization, conversion activities, workload migration activities, and network implementation, etc.
- e. Ongoing Operations - Consist of all recurring monthly cost to the SOM including, where applicable but not limited to, facilities, hardware, software, operations, scheduling and security administration services, network equipment and circuits, etc. SNA circuit monitoring and device support should be identified as a separate cost item.
- f. Maintenance costs, including preventative maintenance and technical support
- g. Anticipated upgrade or revision costs after initial installation
- h. Options and/or Additions - Consist of any proposed optional services offered by the Contractor.
- i. Discounts and rebates
- j. All other costs not itemized above.

If Contractor reduces its prices for any of the software or services during the term of this Contract, the SOM shall have the immediate benefit of such lower prices for new purchases. Contractor shall send notice to the SOM's MDIT Contract Administrator with the reduced prices within 30 days of the reduction taking effect.

Contractor agrees to all the prices, terms, warranties, and benefits provided in this Contract are comparable to or better than the terms presently being offered by Contractor to any other governmental entity purchasing the same quantity under similar terms. If, during the term of this Contract, Contractor shall enter into contracts with any other governmental entity providing greater benefits or more favorable terms than those provided by this Contract, Contractor shall be obligated to provide the same to the SOM for subsequent purchases.

The Contract is a firm, fixed-priced and deliverable-based contract. For legislatively-mandated changes, a separate statement of work will be required and must be deliverable-based.

The **Costs Tables** in **Appendix D** also provide additional hours, but, not to exceed 2,000 hours during the term of the contract for enhancements and modifications to the system resulting from SOM and federal legislative mandates.

Payments shall be linked to the completion of each of the deliverables as identified in Article 1 Section 1.104 (see Appendix D – Cost Tables). Payment to the Contractor will be made upon the completion and acceptance of the deliverable or milestone, not to exceed contractual costs of the phase. A milestone is defined as complete when all of the deliverables within the milestone have been completed.



Contractor will submit properly itemized invoices to the “Bill To” address on the purchase order release. Invoices shall provide and itemize, as applicable:

- Contract number;
- Purchase Order number
- Contractor name, address, phone number, and Federal Tax Identification Number;
- Description of any services or deliverable provided;
- Date(s) of delivery and/or date(s) of installation and set up;
- Price for each item, or Contractor’s list price for each item and applicable discounts;
- Maintenance charges;
- Net invoice price for each item;
- Shipping costs;
- Other applicable charges;
- Total invoice price; and
- Payment terms, including any available prompt payment discounts.

The SOM shall pay maintenance and support charges on a yearly basis. Incorrect or incomplete invoices will be returned to Contractor for correction and reissue.

### **1.601 Price Term**

#### **Labor Rates (See pricing table Appendix D)**

#### **Out-of-Pocket Expenses**

Contractor acknowledges that the out-of-pocket expenses that Contractor expects to incur in performing the Services/ providing the Deliverables (such as, but not limited to, travel and lodging, document reproduction and shipping, and long distance telephone) are included in Contractor’s fixed price for each Statement of Work. Accordingly, Contractor’s out-of-pocket expenses are not separately reimbursable by the State unless, on a case-by-case basis for unusual expenses, the State has agreed in advance and in writing to reimburse Contractor for such an expense at the State’s current travel reimbursement rates.

### **1.602 Tax Excluded from Price**

#### **Sales Tax:**

For purchases made directly by the State, the State is exempt from State and Local Sales Tax.

#### **Federal Excise Tax:**

The State may be exempt from Federal Excise Tax, or the taxes may be reimbursable, if articles purchased under any resulting Contract are used for the State’s exclusive use. Certificates showing exclusive use for the purposes of substantiating a tax-free or tax-reimbursable sale will be sent upon request. If a sale is tax exempt or tax reimbursable under the Internal Revenue Code, prices must not include the Federal Excise Tax.

### **1.603 Holdback (Reserved)**

### **1.700 Additional Requirements**

#### **Federal Grant Requirements**

The following links contain certifications and terms that may be required for some purchases paid via Federal funds.

Lobbying Certifications are usually for agreements over \$100,000. The debarment certification is required for all agreements. The last link is where you can go and search for debarred or suspended contractors.

[http://straylight.law.cornell.edu/uscode/html/uscode31/usc\\_sec\\_31\\_00001352----000-.html](http://straylight.law.cornell.edu/uscode/html/uscode31/usc_sec_31_00001352----000-.html)

[http://www.archives.gov/federal\\_register/codification/executive\\_order/12549.html](http://www.archives.gov/federal_register/codification/executive_order/12549.html)

[http://www.archives.gov/federal\\_register/executive\\_orders/pdf/12869.pdf](http://www.archives.gov/federal_register/executive_orders/pdf/12869.pdf)

<http://www.epls.gov/epl/servlet/EPLSearchMain/1>

**State Funding Obligation**

The State's obligation under this Contract is payable only and solely from funds appropriated for the purpose of this Contract. Contractor acknowledges and agrees that all funds for payments after the end of the current fiscal year are subject to the availability of a legislative appropriation for the purpose of this Contract. Events of non-appropriation are addressed further in **Section 2.210** of this Contract.



## **Article 2. Terms and Conditions**

### **2.000 Contract Structure and Term**

#### **2.001 Contract Term**

This Contract is for a period of Three (3) years commencing on the date that the last signature required to make the Contract enforceable is obtained. All outstanding Purchase Orders must also expire upon the termination (cancellation for any of the reasons listed in **Section 2.130**) of the Contract, unless otherwise extended under the Contract. Absent an early termination for any reason, Purchase Orders issued but not expired, by the end of the Contract's stated term, will remain in effect for the balance of the fiscal year for which they were issued.

#### **2.002 Renewal(s)**

This Contract may be renewed in writing by mutual agreement of the parties not less than 30 days before its expiration. The Contract may be renewed for up to 2 additional 1year periods.

#### **2.003 Legal Effect**

Contractor shall show acceptance of this Contract by signing two copies of the Contract and returning them to the Contract Administrator. The Contractor shall not proceed with the performance of the work to be done under the Contract, including the purchase of necessary materials, until both parties have signed the Contract to show acceptance of its terms, and the Contractor receives a contract release/purchase order that authorizes and defines specific performance requirements.

Except as otherwise agreed in writing by the parties, the State assumes no liability for costs incurred by Contractor or payment under this Contract, until Contractor is notified in writing that this Contract (or Change Order) has been approved by the State Administrative Board (if required), approved and signed by all the parties, and a Purchase Order against the Contract has been issued.

#### **2.004 Attachments & Exhibits**

All Attachments and Exhibits affixed to any and all Statement(s) of Work, or appended to or referencing this Contract, are incorporated in their entirety and form part of this Contract.

#### **2.005 Ordering**

The State will issue a written Purchase Order, Blanket Purchase Order, Direct Voucher or Procurement Card Order, which must be approved by the Contract Administrator or the Contract Administrator's designee, to order any Services/Deliverables under this Contract. All orders are subject to the terms and conditions of this Contract. No additional terms and conditions contained on either a Purchase Order or Blanket Purchase Order apply unless they are also specifically contained in that Purchase Order or Blanket Purchase Order's accompanying Statement of Work.

#### **2.006 Order of Precedence**

The Contract, including any Statements of Work and Exhibits, to the extent not contrary to the Contract, each of which is incorporated for all purposes, constitutes the entire agreement between the parties with respect to the subject matter and supersedes all prior agreements, whether written or oral, with respect to the subject matter and as additional terms and conditions on the purchase order must apply as limited by **Section 2.005**.

In the event of any inconsistency between the terms of the Contract and a Statement of Work, the terms of the Statement of Work will take precedence (as to that Statement of Work only); provided, however, that a Statement of Work may not modify or amend the terms of the Contract, which may be modified or amended only by a formal Contract amendment.

#### **2.007 Headings**

Captions and headings used in the Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of the Contract.



### **2.008 Form, Function & Utility**

If the Contract is for use of more than one State agency and if the Deliverable/Service does not meet the form, function, and utility required by that State agency, that agency may, subject to State purchasing policies, procure the Deliverable/Service from another source.

### **2.009 Reformation and Severability**

Each provision of the Contract is severable from all other provisions of the Contract and, if one or more of the provisions of the Contract is declared invalid, the remaining provisions of the Contract remain in full force and effect.

### **2.010 Consents and Approvals**

Except as expressly provided otherwise in the Contract, if either party requires the consent or approval of the other party for the taking of any action under the Contract, the consent or approval must be in writing and must not be unreasonably withheld or delayed.

### **2.011 No Waiver of Default**

If a party fails to insist upon strict adherence to any term of the Contract then the party has not waived the right to later insist upon strict adherence to that term, or any other term, of the Contract.

### **2.012 Survival**

Any provisions of the Contract that impose continuing obligations on the parties, including without limitation the parties' respective warranty, indemnity and confidentiality obligations, survive the expiration or termination of the Contract for any reason. Specific references to survival in the Contract are solely for identification purposes and not meant to limit or prevent the survival of any other section

## **2.020 Contract Administration**

### **2.021 Issuing Office**

This Contract is issued by the Department of Management and Budget, Purchasing Operations and Department of Information Technology and the Michigan Department of Environmental Quality (MDEQ) (collectively, including all other relevant State of Michigan departments and agencies, the "State"). Purchasing Operations is the sole point of contact in the State with regard to all procurement and contractual matters relating to the Contract. The Purchasing Operations Contract Administrator for this Contract is:

#### **Douglas Collier**

Buyer  
Purchasing Operations  
Department of Management and Budget  
Mason Bldg, 2nd Floor  
PO Box 30026  
Lansing, MI 48909  
Email Collierd1@michigan.gov  
Phone 517/335-4804

### **2.022 Contract Compliance Inspector**

The Director of Purchasing Operations directs the person(s) named below, or his or her designee, to monitor and coordinate the activities for the Contract on a day-to-day basis during its term. **Monitoring Contract activities does not imply the authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions and specifications of the Contract. Purchasing Operations is the only State office authorized to change, modify, amend, alter or clarify the prices, specifications, terms and conditions of this Contract.** The Contract Compliance Inspector for this Contract is:

State of Michigan  
Department of Information Technology  
Attention: Peter F. Devlin  
Constitution Hall  
First Floor, North Tower  
525 West Allegan Street  
Lansing, Michigan 48913

**2.023 Project Manager**

The following individual will oversee the project:

Stanley Samuel, MBA, PMP  
Sr. Project Manager - Operations  
MI Department of Information Technology  
Agency Services, MDEQ  
Email: samuels@michigan.gov  
Phone: 517 241 8011 (O)

**2.024 Change Requests**

The State reserves the right to request from time to time any changes to the requirements and specifications of the Contract and the work to be performed by the Contractor under the Contract. During the course of ordinary business, it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables. At a minimum, to the extent applicable, the State would like the Contractor to provide a detailed outline of all work to be done, including tasks necessary to accomplish the Services/Deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

If the State requests or directs the Contractor to perform any Services/Deliverables that are outside the scope of the Contractor's responsibilities under the Contract ("New Work"), the Contractor must notify the State promptly, and before commencing performance of the requested activities, that it believes the requested activities are New Work. If the Contractor fails to notify the State before commencing performance of the requested activities, any such activities performed before the Contractor gives notice shall be conclusively considered to be in-scope Services/Deliverables, not New Work.

If the State requests or directs the Contractor to perform any services or provide deliverables that are consistent with and similar to the Services/Deliverables being provided by the Contractor under the Contract, but which the Contractor reasonably and in good faith believes are not included within the Statements of Work, then before performing such services or providing such deliverables, the Contractor shall notify the State in writing that it considers the services or deliverables to be an Additional Service/Deliverable for which the Contractor should receive additional compensation. If the Contractor does not so notify the State, the Contractor shall have no right to claim thereafter that it is entitled to additional compensation for performing that service or providing that deliverable. If the Contractor does so notify the State, then such a service or deliverable shall be governed by the Change Request procedure in this Section.

In the event prices or service levels are not acceptable to the State, the Additional Services or New Work shall be subject to competitive bidding based upon the specifications.

(1) Change Request at State Request

If the State should require Contractor to perform New Work, Additional Services or make changes to the Services that would affect the Contract completion schedule or the amount of compensation due Contractor (a "Change"), the State shall submit a written request for Contractor to furnish a proposal for carrying out the requested Change (a "Change Request").



- (2) Contractor Recommendation for Change Requests:  
Contractor shall be entitled to propose a Change to the State, on its own initiative, should it be of the opinion that this would benefit the Contract.
- (3) Upon receipt of a Change Request or on its own initiative, Contractor shall examine the implications of the requested Change on the technical specifications, Contract schedule and price of the Deliverables and Services and shall submit to the State without undue delay a written proposal for carrying out the Change. Contractor's proposal will include any associated changes in the technical specifications, Contract schedule and price and method of pricing of the Services. If the Change is to be performed on a time and materials basis, the Amendment Labor Rates shall apply to the provision of such Services. If Contractor provides a written proposal and should Contractor be of the opinion that a requested Change is not to be recommended, it shall communicate its opinion to the State but shall nevertheless carry out the Change as specified in the written proposal if the State directs it to do so.
- (4) By giving Contractor written notice within a reasonable time, the State must be entitled to accept a Contractor proposal for Change, to reject it, or to reach another agreement with Contractor. Should the parties agree on carrying out a Change, a written Contract Change Notice must be prepared and issued under this Contract, describing the Change and its effects on the Services and any affected components of this Contract (a "Contract Change Notice").
- (5) No proposed Change must be performed until the proposed Change has been specified in a duly executed Contract Change Notice issued by the Department of Management and Budget, Purchasing Operations.
- (6) If the State requests or directs the Contractor to perform any activities that Contractor believes constitute a Change, the Contractor must notify the State that it believes the requested activities are a Change before beginning to work on the requested activities. If the Contractor fails to notify the State before beginning to work on the requested activities, then the Contractor waives any right to assert any claim for additional compensation or time for performing the requested activities. If the Contractor commences performing work outside the scope of this Contract and then ceases performing that work, the Contractor must, at the request of the State, retract any out-of-scope work that would adversely affect the Contract.

### **2.025 Notices**

Any notice given to a party under the Contract must be deemed effective, if addressed to the party as addressed below, upon: (i) delivery, if hand delivered; (ii) receipt of a confirmed transmission by facsimile if a copy of the notice is sent by another means specified in this Section; (iii) the third Business Day after being sent by U.S. mail, postage pre-paid, return receipt requested; or (iv) the next Business Day after being sent by a nationally recognized overnight express courier with a reliable tracking system.

State:

State of Michigan  
Purchasing Operations  
Attention: Douglas Collier  
PO Box 30026  
530 West Allegan  
Lansing, Michigan 48909

#### **with a copy to:**

State of Michigan  
Department of Information Technology  
Attention: Peter F. Devlin  
Constitution Hall  
First Floor, North Tower  
525 West Allegan Street  
Lansing, Michigan 48913



Contractor:

Name:	Tony C. Jeng			e-mail	<a href="mailto:Tony_Jeng@enfotech.com">Tony_Jeng@enfotech.com</a>		
Address:	11 Princess Road, Unit A	City:	Lawrenceville	State:	New Jersey	Zip:	08648
	609-896-9777 Ext. 107	Fax:	608-896-2555	Mobile:	609-933-7919		

Either party may change its address where notices are to be sent by giving notice according to this Section.

**2.026 Binding Commitments**

Representatives of Contractor must have the authority to make binding commitments on Contractor’s behalf within the bounds set forth in the Contract. Contractor may change the representatives from time to time upon written notice.

**2.027 Relationship of the Parties**

The relationship between the State and Contractor is that of client and independent contractor. No agent, employee, or servant of Contractor or any of its Subcontractors must be or must be deemed to be an employee, agent or servant of the State for any reason. Contractor will be solely and entirely responsible for its acts and the acts of its agents, employees, servants and Subcontractors during the performance of the Contract.

**2.028 Covenant of Good Faith**

Each party must act reasonably and in good faith. Unless stated otherwise in the Contract, the parties will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required of them in order for the other party to perform its responsibilities under the Contract.

**2.029 Assignments**

Neither party may assign the Contract, or assign or delegate any of its duties or obligations under the Contract, to any other party (whether by operation of law or otherwise), without the prior written consent of the other party; provided, however, that the State may assign the Contract to any other State agency, department, division or department without the prior consent of Contractor and Contractor may assign the Contract to an affiliate so long as the affiliate is adequately capitalized and can provide adequate assurances that the affiliate can perform the Contract. The State may withhold consent from proposed assignments, subcontracts, or novations when the transfer of responsibility would operate to decrease the State’s likelihood of receiving performance on the Contract or the State’s ability to recover damages.

Contractor may not, without the prior written approval of the State, assign its right to receive payments due under the Contract. If the State permits an assignment, the Contractor is not relieved of its responsibility to perform any of its contractual duties, and the requirement under the Contract that all payments must be made to one entity continues.

If the Contractor intends to assign the contract or any of the Contractor's rights or duties under the Contract, the Contractor must notify the State in writing at least 90 days before the assignment. The Contractor also must provide the State with adequate information about the assignee within a reasonable amount of time before the assignment for the State to determine whether to approve the assignment.

**2.030 General Provisions**

**2.031 Media Releases**

News releases (including promotional literature and commercial advertisements) pertaining to the RFP and Contract or project to which it relates shall not be made without prior written State approval, and then only in accordance with the explicit written instructions from the State. No results of the activities associated with the RFP and Contract are to be released without prior written approval of the State and then only to persons designated.

**2.032 Contract Distribution**

Purchasing Operations retains the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by Purchasing Operations.

**2.033 Permits**

Contractor must obtain and pay any associated costs for all required governmental permits, licenses and approvals for the delivery, installation and performance of the Services. The State must pay for all costs and expenses incurred in obtaining and maintaining any necessary easements or right of way.

**2.034 Website Incorporation**

The State is not bound by any content on the Contractor's website, even if the Contractor's documentation specifically referenced that content and attempts to incorporate it into any other communication, unless the State has actual knowledge of the content and has expressly agreed to be bound by it in a writing that has been manually signed by an authorized representative of the State.

**2.035 Future Bidding Preclusion**

Contractor acknowledges that, to the extent this Contract involves the creation, research, investigation or generation of a future RFP; it may be precluded from bidding on the subsequent RFP. The State reserves the right to disqualify any bidder if the State determines that the bidder has used its position (whether as an incumbent Contractor, or as a Contractor hired to assist with the RFP development, or as a Vendor offering free assistance) to gain a competitive advantage on the RFP

**2.036 Freedom of Information**

All information in any proposal submitted to the State by Contractor and this Contract is subject to the provisions of the Michigan Freedom of Information Act, 1976 Public Act No. 442, as amended, MCL 15.231, et seq (the "FOIA").

**2.037 Disaster Recovery**

Contractor and the State recognize that the State provides essential services in times of natural or man-made disasters. Therefore, except as so mandated by Federal disaster response requirements, Contractor personnel dedicated to providing Services/Deliverables under this Contract will provide the State with priority service for repair and work around in the event of a natural or man-made disaster.

**2.040 Financial Provisions****2.041 Fixed Prices for Services/Deliverables**

Each Statement of Work or Purchase Order issued under this Contract shall specify (or indicate by reference to the appropriate Contract ) the firm, fixed prices for all Services/Deliverables, and the associated payment milestones and payment amounts. The State may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by the Contract Administrator, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

**2.042 Adjustments for Reductions in Scope of Services/Deliverables**

If the scope of the Services/Deliverables under any Statement of Work issued under this Contract is subsequently reduced by the State, the parties shall negotiate an equitable reduction in Contractor's charges under such Statement of Work commensurate with the reduction in scope.

**2.043 Services/Deliverables Covered**

For all Services/Deliverables to be provided by Contractor (and its Subcontractors, if any) under this Contract, the State shall not be obligated to pay any amounts in addition to the charges specified in this Contract.



#### **2.044 Invoicing and Payment – In General**

- (a) Each Statement of Work issued under this Contract shall list (or indicate by reference to the appropriate Contract Exhibit) the prices for all Services/Deliverables, equipment and commodities to be provided, and the associated payment milestones and payment amounts.
- (b) Each Contractor invoice will show details as to charges by Service/Deliverable component and location at a level of detail reasonably necessary to satisfy the State's accounting and charge-back requirements. Invoices for Services performed on a time and materials basis will show, for each individual, the number of hours of Services performed during the billing period, the billable skill/labor category for such person and the applicable hourly billing rate. Prompt payment by the State is contingent on the Contractor's invoices showing the amount owed by the State minus any holdback amount to be retained by the State in accordance with **Section 1.064**.
- (c) Correct invoices will be due and payable by the State, in accordance with the State's standard payment procedure as specified in 1984 Public Act No. 279, MCL 17.51 et seq., within 45 days after receipt, provided the State determines that the invoice was properly rendered.
- (d) All invoices should reflect actual work done. Specific details of invoices and payments will be agreed upon between the Contract Administrator and the Contractor after the proposed Contract Agreement has been signed and accepted by both the Contractor and the Director of Purchasing Operations, Department of Management & Budget. This activity will occur only upon the specific written direction from Purchasing Operations.

The specific payment schedule for any Contract(s) entered into, as the State and the Contractor(s) will mutually agree upon. The schedule should show payment amount and should reflect actual work done by the payment dates, less any penalty cost charges accrued by those dates. As a general policy statements shall be forwarded to the designated representative by the 15th day of the following month.

The Government may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by the Contract Administrator, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

#### **2.045 Pro-ration**

To the extent there are any Services that are to be paid for on a monthly basis, the cost of such Services shall be pro-rated for any partial month.

#### **2.046 Antitrust Assignment**

The Contractor assigns to the State any claim for overcharges resulting from antitrust violations to the extent that those violations concern materials or services supplied by third parties to the Contractor, toward fulfillment of this Contract.

#### **2.047 Final Payment**

The making of final payment by the State to Contractor does not constitute a waiver by either party of any rights or other claims as to the other party's continuing obligations under the Contract, nor will it constitute a waiver of any claims by one party against the other arising from unsettled claims or failure by a party to comply with this Contract, including claims for Services and Deliverables not reasonably known until after acceptance to be defective or substandard. Contractor's acceptance of final payment by the State under this Contract shall constitute a waiver of all claims by Contractor against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still unsettled.

#### **2.048 Electronic Payment Requirement**

Electronic transfer of funds is required for payments on State Contracts. Contractors are required to register with the State electronically at <http://www.cpexpress.state.mi.us>. As stated in Public Act 431 of 1984, all contracts that the State enters into for the purchase of goods and services shall provide that payment will be made by electronic fund transfer (EFT).



## **2.050 Taxes**

### **2.051 Employment Taxes**

Contractors are expected to collect and pay all applicable federal, state, and local employment taxes, including the taxes.

### **2.052 Sales and Use Taxes**

Contractors are required to be registered and to remit sales and use taxes on taxable sales of tangible personal property or services delivered into the State. Contractors that lack sufficient presence in Michigan to be required to register and pay tax must do so as a volunteer. This requirement extends to: (1) all members of any controlled group as defined in § 1563(a) of the Internal Revenue Code and applicable regulations of which the company is a member, and (2) all organizations under common control as defined in § 414(c) of the Internal Revenue Code and applicable regulations of which the company is a member that make sales at retail for delivery into the State are registered with the State for the collection and remittance of sales and use taxes. In applying treasury regulations defining “two or more trades or businesses under common control” the term “organization” means sole proprietorship, a partnership (as defined in § 701(a) (2) of the Internal Revenue Code), a trust, an estate, a corporation, or a limited liability company.

## **2.060 Contract Management**

### **2.061 Contractor Personnel Qualifications**

All persons assigned by Contractor to the performance of Services under this Contract must be employees of Contractor or its majority-owned (directly or indirectly, at any tier) subsidiaries (or a State-approved Subcontractor) and must be fully qualified to perform the work assigned to them. Contractor must include a similar provision in any subcontract entered into with a Subcontractor. For the purposes of this Contract, independent contractors engaged by Contractor solely in a staff augmentation role must be treated by the State as if they were employees of Contractor for this Contract only; however, the State understands that the relationship between Contractor and Subcontractor is an independent contractor relationship.

### **2.062 Contractor Key Personnel**

- (a) The Contractor must provide the Contract Compliance Inspector with the names of the Key Personnel. See Attachment A
- (b) Key Personnel must be dedicated as defined in the Statement of Work to the Project for its duration in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work.
- (c) The State will have the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, will introduce the individual to the appropriate State representatives, and will provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection.
- (d) Contractor must not remove any Key Personnel from their assigned roles or the Contract without the prior written consent of the State. The Contractor’s removal of Key Personnel without the prior written consent of the State is an unauthorized removal (“Unauthorized Removal”). Unauthorized Removals does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation or for cause termination of the Key Personnel’s employment. Unauthorized Removals does not include replacing Key Personnel because of promotions or other job movements allowed by Contractor personnel policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides 30 days of shadowing unless parties agree to a different time period. The Contractor with the



State must review any Key Personnel replacements, and appropriate transition planning will be established. Any Unauthorized Removal may be considered by the State to be a material breach of the Contract, in respect of which the State may elect to exercise its termination and cancellation rights.

- (e) The Contractor must notify the Contract Compliance Inspector and the Contract Administrator at least 10 business days before redeploying non-Key Personnel, who are dedicated to primarily to the Project, to other projects. If the State does not object to the redeployment by its scheduled date, the Contractor may then redeploy the non-Key Personnel.

The contractor has identified their personnel in the staffing plan, see phase I of section 1.104 and included these names on the organization chart Article 1, Attachment A along with the roles for each person.

The Contractor will update when changed, an organizational chart indicating lines of authority and communication for personnel involved in performance of this Contract and relationships of this staff to other programs or functions of the firm. This chart must also show lines of authority to the next senior level of management and indicate who within the firm will have prime responsibility and final authority for the work. In the event that any of the staff shown on the organization chart do not work for the prime contractor, the names of the employing firms must be identified for all staff on the organization chart.

The Contractor's staff must be able to pass a security clearance check conducted by the Contractor. The Contractor must present certifications evidencing satisfactory background checks and drug tests for all staff identified for assignment to this project. The Contractor is responsible for any costs associated with ensuring their staff meets all requirements.

The Contractor has provided a Single Point of Contact (SPOC) within their organization for project logistics and related duties. The duties of the SPOC shall include, but not be limited to:

- supporting the management of the Contract,
- facilitating dispute resolution, and
- advising the SOM of performance under the terms and conditions of the Contract.

The SOM reserves the right to require a change in the contractor-designated SPOC if the assigned SPOC is not, in the opinion of the SOM, adequately serving the needs of the SOM.

The State of Michigan has identified that the Key Person for this project will be the Project Manager.

All Key Personnel may be subject to the SOM's interview and approval process.

The Contractor's project manager will work closely with the designated personnel from the SOM to insure a smooth transition to the new system. The project manager will coordinate all of the activities of the Contractor personnel assigned to the project and create all reports required by SOM. The Contractor's project manager responsibilities include, at a minimum:

- Manage all defined Contractor responsibilities in this Scope of Services.
- Manage Contractor's subcontractors, if any
- Develop the project plan and schedule, and update as needed
- Serve as the point person for all project issues
- Coordinate and oversee the day-to-day project activities of the project team
- Assess and report project feedback and status
- Escalate project issues, project risks, and other concerns
- Review all project deliverables and provide feedback
- Proactively propose/suggest options and alternatives for consideration
- Utilize change control procedures
- Prepare project documents and materials
- Manage and report on the project's budget



The Contractor will provide sufficient qualified staffing to satisfy the deliverables of this Statement of Work.

#### **2.063 Re-assignment of Personnel at the State's Request**

The State reserves the right to require the removal from the Project of Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request must be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request must be based on legitimate, good-faith reasons. Replacement personnel for the removed person must be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any incident with removed personnel results in delay not reasonably anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Service will not be counted for a time as agreed to by the parties.

#### **2.064 Contractor Personnel Location**

All staff assigned by Contractor to work on the Contract will perform their duties either primarily at Contractor's offices and facilities or at State facilities. Without limiting the generality of the foregoing, Key Personnel will, at a minimum, spend at least the amount of time on-site at State facilities as indicated in the applicable Statement of Work. Subject to availability, selected Contractor personnel may be assigned office space to be shared with State personnel.

#### **2.065 Contractor Identification**

Contractor employees must be clearly identifiable while on State property by wearing a State-issued badge, as required. Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with State personnel by telephone or other means.

#### **2.066 Cooperation with Third Parties**

Contractor agrees to cause its personnel and the personnel of any Subcontractors to cooperate with the State and its agents and other contractors including the State's Quality Assurance personnel. As reasonably requested by the State in writing, the Contractor will provide to the State's agents and other contractors reasonable access to Contractor's Project personnel, systems and facilities to the extent the access relates to activities specifically associated with this Contract and will not interfere or jeopardize the safety or operation of the systems or facilities. The State acknowledges that Contractor's time schedule for the Contract is very specific and agrees not to unnecessarily or unreasonably interfere with, delay or otherwise impeded Contractor's performance under this Contract with the requests for access.

#### **2.067 Contract Management Responsibilities**

Contractor shall be responsible for all acts and omissions of its employees, as well as the acts and omissions of any other personnel furnished by Contractor to perform the Services. Contractor shall have overall responsibility for managing and successfully performing and completing the Services/Deliverables, subject to the overall direction and supervision of the State and with the participation and support of the State as specified in this Contract. Contractor's duties will include monitoring and reporting the State's performance of its participation and support responsibilities (as well as Contractor's own responsibilities) and providing timely notice to the State in Contractor's reasonable opinion if the State's failure to perform its responsibilities in accordance with **Article 1, Attachment E** (Project Plan) is likely to delay the timely achievement of any Contract tasks.

The Contractor will provide the Services/Deliverables either directly or through its affiliates, subsidiaries, subcontractors or resellers. Regardless of the entity providing the Service/Deliverable, the Contractor will act as a single point of contact coordinating these entities to meet the State's need for Services/Deliverables. Nothing in this Contract, however, shall be construed to authorize or require any party to violate any applicable law or regulation in its performance of this Contract.



### **2.068 Contractor Return of State Equipment/Resources**

The Contractor must return to the State any State-furnished equipment, facilities and other resources when no longer required for the Contract in the same condition as when provided by the State, reasonable wear and tear excepted.

### **2.070 Subcontracting by Contractor**

#### **2.071 Contractor full Responsibility**

Contractor shall have full responsibility for the successful performance and completion of all of the Services and Deliverables. The State will consider Contractor to be the sole point of contact with regard to all contractual matters under this Contract, including payment of any and all charges for Services and Deliverables.

#### **2.072 State Consent to delegation**

Contractor shall not delegate any duties under this Contract to a Subcontractor unless the Department of Management and Budget, Purchasing Operations has given written consent to such delegation. The State shall have the right of prior written approval of all Subcontractors and to require Contractor to replace any Subcontractors found, in the reasonable judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good faith reasons. Replacement Subcontractor(s) for the removed Subcontractor shall be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed Subcontractor, the State will agree to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with a removed Subcontractor results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLA for the affected Work will not be counted for a time agreed upon by the parties.

#### **2.073 Subcontractor bound to Contract**

In any subcontracts entered into by Contractor for the performance of the Services, Contractor shall require the Subcontractor, to the extent of the Services to be performed by the Subcontractor, to be bound to Contractor by the terms of this Contract and to assume toward Contractor all of the obligations and responsibilities that Contractor, by this Contract, assumes toward the State. The State reserves the right to receive copies of and review all subcontracts, although Contractor may delete or mask any proprietary information, including pricing, contained in such contracts before providing them to the State. The management of any Subcontractor will be the responsibility of Contractor, and Contractor shall remain responsible for the performance of its Subcontractors to the same extent as if Contractor had not subcontracted such performance. Contractor shall make all payments to Subcontractors or suppliers of Contractor. Except as otherwise agreed in writing by the State and Contractor, the State will not be obligated to direct payments for the Services other than to Contractor. The State's written approval of any Subcontractor engaged by Contractor to perform any obligation under this Contract shall not relieve Contractor of any obligations or performance required under this Contract. Attached as **Exhibit A** is a list of the Subcontractors, if any, approved by the State as of the execution of this Contract, together with a copy of the applicable subcontract.

#### **2.074 Flow Down**

Except where specifically approved in writing by the State on a case-by-case basis, Contractor shall flow down the obligations in **Sections 2.031, 2.060, 2.100, 2.110, 2.120, 2.130, and 2.200** in all of its agreements with any Subcontractors.

#### **2.075 Competitive Selection**

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the Contract.



## **2.080 State Responsibilities**

### **2.081 Equipment**

The State will provide only the equipment and resources identified in the Statements of Work and other Contract Exhibits.

### **2.082 Facilities**

The State must designate space as long as it is available and as provided in the Statement of Work, to house the Contractor's personnel whom the parties agree will perform the Services/Deliverables at State facilities (collectively, the "State Facilities"). The Contractor must have reasonable access to, and unless agreed otherwise by the parties in writing must observe and comply with all rules and regulations relating to each of the State Facilities (including hours of operation) used by the Contractor in the course of providing the Services. Contractor agrees that it will not, without the prior written consent of the State, use any State Facilities or access any State information systems provided for the Contractor's use, or to which the Contractor otherwise gains access in the course of performing the Services, for any purpose other than providing the Services to the State.

## **2.090 Security**

### **2.091 Background Checks**

On a case-by-case basis, the State may investigate the Contractor's personnel before they may have access to State facilities and systems. The scope of the background check is at the discretion of the State and the results will be used to determine Contractor personnel eligibility for working within State facilities and systems. The investigations will include Michigan State Police Background checks (ICHAT) and may include the National Crime Information Center (NCIC) Finger Prints. Proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the NCIC Finger Print Check. Any request for background checks will be initiated by the State and will be reasonably related to the type of work requested.

All Contractor personnel will also be expected to comply with the State's security and acceptable use policies for State IT equipment and resources. See <http://www.michigan.gov/dit>. Furthermore, Contractor personnel will be expected to agree to the State's security and acceptable use policies before the Contractor personnel will be accepted as a resource to perform work for the State. It is expected the Contractor will present these documents to the prospective employee before the Contractor presents the individual to the State as a proposed resource. Contractor staff will be expected to comply with all Physical Security procedures in place within the facilities where they are working.

### **2.092 Security Breach Notification**

If the Contractor breaches this Section, the Contractor must (i) promptly cure any deficiencies and (ii) comply with any applicable federal and state laws and regulations pertaining to unauthorized disclosures. Contractor and the State will cooperate to mitigate, to the extent practicable, the effects of any breach, intrusion, or unauthorized use or disclosure. Contractor must report to the State in writing any use or disclosure of Confidential Information, whether suspected or actual, other than as provided for by the Contract within 10 days of becoming aware of the use or disclosure or the shorter time period as is reasonable under the circumstances.

### **2.093 PCI DATA Security Requirements**

Contractors with access to credit/debit card cardholder data must adhere to the Payment Card Industry (PCI) Data Security requirements. Contractor agrees that they are responsible for security of cardholder data in their possession. Contractor agrees that data can ONLY be used for assisting the State in completing a transaction, supporting a loyalty program, supporting the State, providing fraud control services, or for other uses specifically required by law.

Contractor agrees to provide business continuity in the event of a major disruption, disaster or failure.



The Contractor will contact the Department of Management and Budget Financial Services immediately to advise them of any breaches in security where card data has been compromised. In the event of a security intrusion, the Contractor agrees the Payment Card Industry representative, or a Payment Card Industry approved third party, will be provided with full cooperation and access to conduct a thorough security review. The review will validate compliance with the Payment Card Industry Data Security Standard for protecting cardholder data. Contractor agrees to properly dispose sensitive cardholder data when no longer needed. The Contractor will continue to treat cardholder data as confidential upon contract termination.

The Contractor will provide the Department of Management and Budget Financial Services documentation showing PCI Data Security certification has been achieved. The Contractor will advise the Department of Management and Budget Financial Services of all failures to comply with the PCI Data Security Requirements. Failures include, but are not limited to system scans and self-assessment questionnaires. The Contractor will provide a time line for corrective action.

## **2.100 Confidentiality**

### **2.101 Confidentiality**

Contractor and the State each acknowledge that the other possesses and will continue to possess confidential information that has been developed or received by it. As used in this Section, "Confidential Information" of Contractor must mean all non-public proprietary information of Contractor (other than Confidential Information of the State as defined below), which is marked confidential, restricted, proprietary, or with a similar designation. "Confidential Information" of the State must mean any information which is retained in confidence by the State (or otherwise required to be held in confidence by the State under applicable federal, state and local laws and regulations) or which, in the case of tangible materials provided to Contractor by the State under its performance under this Contract, is marked as confidential, proprietary or with a similar designation by the State. "Confidential Information" excludes any information (including this Contract) that is publicly available under the Michigan FOIA.

### **2.102 Protection and Destruction of Confidential Information**

The State and Contractor will each use at least the same degree of care to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure, publication or dissemination of its own confidential information of like character, but in no event less than reasonable care. Neither Contractor nor the State will (i) make any use of the Confidential Information of the other except as contemplated by this Contract, (ii) acquire any right in or assert any lien against the Confidential Information of the other, or (iii) if requested to do so, refuse for any reason to promptly return the other party's Confidential Information to the other party. Each party will limit disclosure of the other party's Confidential Information to employees and Subcontractors who must have access to fulfill the purposes of this Contract. Disclosure to, and use by, a Subcontractor is permissible where (A) use of a Subcontractor is authorized under this Contract, (B) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Subcontractor's scope of responsibility, and (C) Contractor obligates the Subcontractor in a written Contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor and of any Subcontractor having access or continued access to the State's Confidential Information may be required to execute an acknowledgment that the employee has been advised of Contractor's and the Subcontractor's obligations under this Section and of the employee's obligation to Contractor or Subcontractor, as the case may be, to protect the Confidential Information from unauthorized use or disclosure.

Promptly upon termination or cancellation of the Contract for any reason, Contractor must certify to the State that Contractor has destroyed all State Confidential Information.

### **2.103 Exclusions**

Notwithstanding the foregoing, the provisions in this Section will not apply to any particular information which the State or Contractor can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving party; (iii) was in the possession of the receiving party at the time of disclosure to it without an obligation of



confidentiality; (iv) was received after disclosure to it from a third party who had a lawful right to disclose the information to it without any obligation to restrict its further disclosure; or (v) was independently developed by the receiving party without reference to Confidential Information of the furnishing party. Further, the provisions of this Section will not apply to any particular Confidential Information to the extent the receiving party is required by law to disclose the Confidential Information, provided that the receiving party (i) promptly provides the furnishing party with notice of the legal request, and (ii) assists the furnishing party in resisting or limiting the scope of the disclosure as reasonably requested by the furnishing party.

#### **2.104 No Implied Rights**

Nothing contained in this Section must be construed as obligating a party to disclose any particular Confidential Information to the other party, or as granting to or conferring on a party, expressly or impliedly, any right or license to the Confidential Information of the other party.

#### **2.105 Respective Obligations**

The parties' respective obligations under this Section must survive the termination or expiration of this Contract for any reason.

#### **2.110 Records and Inspections**

##### **2.111 Inspection of Work Performed**

The State's authorized representatives must at all reasonable times and with 10 days prior written request, have the right to enter Contractor's premises, or any other places, where the Services are being performed, and must have access, upon reasonable request, to interim drafts of Deliverables or work-in-progress. Upon 10 Days prior written notice and at all reasonable times, the State's representatives must be allowed to inspect, monitor, or otherwise evaluate the work being performed and to the extent that the access will not reasonably interfere or jeopardize the safety or operation of the systems or facilities. Contractor must provide all reasonable facilities and assistance for the State's representatives.

##### **2.112 Examination of Records**

For seven years after the Contractor provides any work under this Contract (the "Audit Period"), the State may examine and copy any of Contractor's books, records, documents and papers pertinent to establishing Contractor's compliance with the Contract and with applicable laws and rules. The State must notify the Contractor 20 days before examining the Contractor's books and records. The State does not have the right to review any information deemed confidential by the Contractor to the extent access would require the confidential information to become publicly available. This provision also applies to the books, records, accounts, documents and papers, in print or electronic form, of any parent, affiliated or subsidiary organization of Contractor, or any Subcontractor of Contractor performing services in connection with the Contract.

##### **2.113 Retention of Records**

Contractor must maintain at least until the end of the Audit Period all pertinent financial and accounting records (including time sheets and payroll records, and information pertaining to the Contract and to the Services, equipment, and commodities provided under the Contract) pertaining to the Contract according to generally accepted accounting principles and other procedures specified in this Section. Financial and accounting records must be made available, upon request, to the State at any time during the Audit Period. If an audit, litigation, or other action involving Contractor's records is initiated before the end of the Audit Period, the records must be retained until all issues arising out of the audit, litigation, or other action are resolved or until the end of the Audit Period, whichever is later.

##### **2.114 Audit Resolution**

If necessary, the Contractor and the State will meet to review each audit report promptly after issuance. The Contractor will respond to each audit report in writing within 30 days from receipt of the report, unless a shorter response time is specified in the report. The Contractor and the State must develop, agree upon and monitor an action plan to promptly address and resolve any deficiencies, concerns, and/or recommendations in the audit report.



### **2.115 Errors**

If the audit demonstrates any errors in the documents provided to the State, then the amount in error must be reflected as a credit or debit on the next invoice and in subsequent invoices until the amount is paid or refunded in full. However, a credit or debit may not be carried for more than four invoices. If a balance remains after four invoices, then the remaining amount will be due as a payment or refund within 45 days of the last quarterly invoice that the balance appeared on or termination of the contract, whichever is earlier.

In addition to other available remedies, the difference between the payment received and the correct payment amount is greater than 10%, then the Contractor must pay all of the reasonable costs of the audit.

### **2.120 Warranties**

#### **2.121 Warranties and Representations**

The Contractor represents and warrants:

- (a) It is capable in all respects of fulfilling and must fulfill all of its obligations under this Contract. The performance of all obligations under this Contract must be provided in a timely, professional, and workman-like manner and must meet the performance and operational standards required under this Contract.
- (b) The Contract Appendices, Attachments and Exhibits identify the equipment and software and services necessary for the Deliverable(s) to perform and Services to operate in compliance with the Contract's requirements and other standards of performance.
- (c) It is the lawful owner or licensee of any Deliverable licensed or sold to the State by Contractor or developed by Contractor under this Contract, and Contractor has all of the rights necessary to convey to the State the ownership rights or licensed use, as applicable, of any and all Deliverables. None of the Deliverables provided by Contractor to the State under neither this Contract, nor their use by the State, will infringe the patent, copyright, trade secret, or other proprietary rights of any third party.
- (d) If, under this Contract, Contractor procures any equipment, software or other Deliverable for the State (including equipment, software and other Deliverables manufactured, re-marketed or otherwise sold by Contractor under Contractor's name), then in addition to Contractor's other responsibilities with respect to the items in this Contract, Contractor must assign or otherwise transfer to the State or its designees, or afford the State the benefits of, any manufacturer's warranty for the Deliverable.
- (e) The contract signatory has the power and authority, including any necessary corporate authorizations, necessary to enter into this Contract, on behalf of Contractor.
- (f) It is qualified and registered to transact business in all locations where required.
- (g) Neither the Contractor nor any Affiliates, nor any employee of either, has, must have, or must acquire, any contractual, financial, business, or other interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of its duties and responsibilities to the State under this Contract or otherwise create an appearance of impropriety with respect to the award or performance of this Agreement. Contractor must notify the State about the nature of the conflict or appearance of impropriety within two days of learning about it.
- (h) Neither Contractor nor any Affiliates, nor any employee of either has accepted or must accept anything of value based on an understanding that the actions of the Contractor or Affiliates or employee on behalf of the State would be influenced. Contractor must not attempt to influence any State employee by the direct or indirect offer of anything of value.
- (i) Neither Contractor nor any Affiliates, nor any employee of either has paid or agreed to pay any person, other than bona fide employees and consultants working solely for Contractor or the Affiliate, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract.
- (j) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other bidder; and no attempt was made by Contractor to induce any other person to submit or not submit a proposal for the purpose of restricting competition.



- (k) All financial statements, reports, and other information furnished by Contractor to the State as part of its response to the RFP or otherwise in connection with this Contract fairly and accurately represent the business, properties, financial condition, and results of operations of Contractor as of the respective dates, or for the respective periods, covered by the financial statements, reports, other information. Since the respective dates or periods covered by the financial statements, reports, or other information, there have been no material adverse changes in the business, properties, financial condition, or results of operations of Contractor.
- (l) All written information furnished to the State by or for the Contractor in connection with this Contract, including its bid, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make the information not misleading.
- (m) It is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State or the department within the previous five years for the reason that Contractor failed to perform or otherwise breached an obligation of the contract.
- (n) If any of the certifications, representations, or disclosures made in the Contractor's original bid response change after contract award, the Contractor is required to report those changes immediately to the Department of Management and Budget, Purchasing Operations.

#### **2.122 Warranty of Merchantability**

Goods provided by Contractor under this agreement shall be merchantable. All goods provided under this Contract shall be of good quality within the description given by the State, shall be fit for their ordinary purpose, shall be adequately contained and packaged within the description given by the State, shall conform to the agreed upon specifications, and shall conform to the affirmations of fact made by the Contractor or on the container or label.

#### **2.123 Warranty of Fitness for a Particular Purpose**

When the Contractor has reason to know or knows any particular purpose for which the goods are required, and the State is relying on the Contractor's skill or judgment to select or furnish suitable goods, there is a warranty that the goods are fit for such purpose.

#### **2.124 Warranty of Title**

Contractor shall, in providing goods to the State, convey good title in those goods, whose transfer is right and lawful. All goods provided by Contractor shall be delivered free from any security interest, lien, or encumbrance of which the State, at the time of contracting, has no knowledge. Goods provided by Contractor, under this Contract, shall be delivered free of any rightful claim of any third person by of infringement or the like.

#### **2.125 Equipment Warranty**

To the extent Contractor is responsible under this Contract for maintaining equipment/system(s), Contractor represents and warrants that it will maintain the equipment/system(s) in good operating condition and will undertake all repairs and preventive maintenance according to the applicable manufacturer's recommendations for the period specified in this Contract.

The Contractor represents and warrants that the equipment/system(s) are in good operating condition and operate and perform to the requirements and other standards of performance contained in this Contract, when installed, at the time of Final Acceptance by the State, and for a period of (1) one year commencing upon the first day following Final Acceptance.

Within [REDACTED] business days of notification from the State, the Contractor must adjust, repair or replace all equipment that is defective or not performing in compliance with the Contract. The Contractor must assume all costs for replacing parts or units and their installation including transportation and delivery fees, if any.



The Contractor must provide a toll-free telephone number to allow the State to report equipment failures and problems to be remedied by the Contractor.

The Contractor agrees that all warranty service it provides under this Contract must be performed by Original Equipment Manufacturer (OEM) trained, certified and authorized technicians.

The Contractor is the sole point of contact for warranty service. The Contractor warrants that it will pass through to the State any warranties obtained or available from the original equipment manufacturer, including any replacement, upgraded, or additional equipment warranties.

### **2.126 Equipment to be New**

If applicable, all equipment provided under this Contract by Contractor shall be new where Contractor has knowledge regarding whether the equipment is new or assembled from new or serviceable used parts that are like new in performance or has the option of selecting one or the other. Equipment that is assembled from new or serviceable used parts that are like new in performance is acceptable where Contractor does not have knowledge or the ability to select one or other, unless specifically agreed otherwise in writing by the State.

### **2.127 Prohibited Products**

The State will not accept salvage, distressed, outdated or discontinued merchandise. Shipping of such merchandise to any State agency, as a result of an order placed against the Contract, shall be considered default by the Contractor of the terms and conditions of the Contract and may result in cancellation of the Contract by the State. The brand and product number offered for all items shall remain consistent for the term of the Contract, unless Purchasing Operations has approved a change order pursuant to **Section 2.024**.

### **2.128 Consequences for Breach**

In addition to any remedies available in law, if the Contractor breaches any of the warranties contained in this section, the breach may be considered as a default in the performance of a material obligation of this Contract.

## **2.130 Insurance**

### **2.131 Liability Insurance**

The Contractor must provide proof of the minimum levels of insurance coverage as indicated below. The insurance must protect the State from claims that may arise out of or result from the Contractor's performance of services under the terms of this Contract, whether the services are performed by the Contractor, or by any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.

The Contractor waives all rights against the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents for recovery of damages to the extent these damages are covered by the insurance policies the Contractor is required to maintain under this Contract.

All insurance coverage provided relative to this Contract/Purchase Order are PRIMARY and NON-CONTRIBUTING to any comparable liability insurance (including self-insurances) carried by the State.

The insurance must be written for not less than any minimum coverage specified in this Contract or required by law, whichever is greater.

The insurers selected by Contractor must have an A.M. Best rating of A or better, or as otherwise approved in writing by the State, or if the ratings are no longer available, with a comparable rating from a recognized insurance rating agency. All policies of insurance required in this Contract must be issued by companies that have been approved to do business in the State.

See [www.michigan.gov/dleg](http://www.michigan.gov/dleg).



Where specific limits are shown, they are the minimum acceptable limits. If Contractor's policy contains higher limits, the State must be entitled to coverage to the extent of the higher limits.

The Contractor is required to pay for and provide the type and amount of insurance checked  below:

- 1. Commercial General Liability with the following minimum coverage:  
 \$2,000,000 General Aggregate Limit other than Products/Completed Operations  
 \$2,000,000 Products/Completed Operations Aggregate Limit  
 \$1,000,000 Personal & Advertising Injury Limit  
 \$1,000,000 Each Occurrence Limit

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents as ADDITIONAL INSUREDS on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

- 2. If a motor vehicle is used to provide services or products under this Contract, the Contractor must have vehicle liability insurance on any auto including owned, hired and non-owned vehicles used in Contractor's business for bodily injury and property damage as required by law.

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents as ADDITIONAL INSUREDS on the vehicle liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

- 3. Workers' compensation coverage must be provided according to applicable laws governing the employees and employers work activities in the state of the Contractor's domicile. If a self-insurer provides the applicable coverage, proof must be provided of approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of qualification, Contractor must provide appropriate certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

Any certificates of insurance received must also provide a list of states where the coverage is applicable.

The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company. This provision must not be applicable where prohibited or limited by the laws of the jurisdiction in which the work is to be performed.

- 4. Employers liability insurance with the following minimum limits:  
 \$100,000 each accident  
 \$100,000 each employee by disease  
 \$500,000 aggregate disease

- 5. Employee Fidelity, including Computer Crimes, insurance naming the State as a loss payee, providing coverage for direct loss to the State and any legal liability of the State arising out of or related to fraudulent or dishonest acts committed by the employees of Contractor or its Subcontractors, acting alone or in collusion with others, in a minimum amount of one million dollars (\$1,000,000.00) with a maximum deductible of fifty thousand dollars (\$50,000.00).

- 6. Umbrella or Excess Liability Insurance in a minimum amount of ten million dollars (\$10,000,000.00), which must apply, at a minimum, to the insurance required in Subsection 1 (Commercial General Liability) above.



- 7. Professional Liability (Errors and Omissions) Insurance with the following minimum coverage: three million dollars (\$3,000,000.00) each occurrence and three million dollars (\$3,000,000.00) annual aggregate.
  
- 8. Fire and Personal Property Insurance covering against any loss or damage to the office space used by Contractor for any reason under this Contract, and the equipment, software and other contents of the office space, including without limitation, those contents used by Contractor to provide the Services to the State, up to its replacement value, where the office space and its contents are under the care, custody and control of Contractor. The policy must cover all risks of direct physical loss or damage, including without limitation, flood and earthquake coverage and coverage for computer hardware and software. The State must be endorsed on the policy as a loss payee as its interests appear.

### **2.132 Subcontractor Insurance Coverage**

Except where the State has approved in writing a Contractor subcontract with other insurance provisions, Contractor must require all of its Subcontractors under this Contract to purchase and maintain the insurance coverage as described in this Section for the Contractor in connection with the performance of work by those Subcontractors. Alternatively, Contractor may include any Subcontractors under Contractor's insurance on the coverage required in this Section. Subcontractor(s) must fully comply with the insurance coverage required in this Section. Failure of Subcontractor(s) to comply with insurance requirements does not limit Contractor's liability or responsibility.

### **2.133 Certificates of Insurance and Other Requirements**

Contractor must furnish to DMB Purchasing Operations, certificate(s) of insurance verifying insurance coverage or providing satisfactory evidence of self-insurance as required in this Section (the "Certificates"). The Certificate must be on the standard "accord" form or equivalent. **The Contract Number or the Purchase Order Number must be shown on the Certificate Of Insurance To Assure Correct Filing.** All Certificate(s) are to be prepared and submitted by the Insurance Provider. All Certificate(s) must contain a provision indicating that coverage afforded under the policies WILL NOT BE CANCELLED, MATERIALLY CHANGED, OR NOT RENEWED without 30 days prior written notice, except for 10 days for non-payment of premium, having been given to the Director of Purchasing Operations, Department of Management and Budget. The notice must include the Contract or Purchase Order number affected. Before the Contract is signed, and not less than 20 days before the insurance expiration date every year thereafter, the Contractor must provide evidence that the State and its agents, officers and employees are listed as additional insured under each commercial general liability and commercial automobile liability policy. In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

The Contractor must maintain all required insurance coverage throughout the term of the Contract and any extensions and, in the case of claims-made Commercial General Liability policies, must secure tail coverage for at least three years following the expiration or termination for any reason of this Contract. The minimum limits of coverage specified above are not intended, and must not be construed; to limit any liability or indemnity of Contractor under this Contract to any indemnified party or other persons. Contractor is responsible for all deductibles with regard to the insurance. If the Contractor fails to pay any premium for required insurance as specified in this Contract, or if any insurer cancels or significantly reduces any required insurance as specified in this Contract without the State's written consent, then the State may, after the State has given the Contractor at least 30 days written notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor, or the Contractor must pay that cost upon demand by the State.



## **2.140 Indemnification**

### **2.141 General Indemnification**

To the extent permitted by law, the Contractor must indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Contractor in the performance of this Contract and that are attributable to the negligence or tortious acts of the Contractor or any of its subcontractors, or by anyone else for whose acts any of them may be liable.

### **2.142 Code Indemnification**

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from any claim, loss, or expense arising from Contractor's breach of the No Surreptitious Code Warranty.

### **2.143 Employee Indemnification**

In any claims against the State of Michigan, its departments, divisions, agencies, sections, commissions, officers, employees and agents, by any employee of the Contractor or any of its subcontractors, the indemnification obligation under the Contract must not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Contractor or any of its subcontractors under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

### **2.144 Patent/Copyright Infringement Indemnification**

To the extent permitted by law, the Contractor must indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that the action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Contractor or its subcontractors, or the operation of the equipment, software, commodity or service, or the use or reproduction of any documentation provided with the equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or service, or its operation, become or in the State's or Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor must at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if the option is not reasonably available to the Contractor, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if the option is not reasonably available to Contractor, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Contractor has no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; (ii) use of the equipment in a configuration other than implemented or approved in writing by the Contractor, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Contractor under this Contract.



### **2.145 Continuation of Indemnification Obligations**

The Contractor's duty to indemnify under this Section continues in full force and effect, notwithstanding the expiration or early cancellation of the Contract, with respect to any claims based on facts or conditions that occurred before expiration or cancellation.

### **2.146 Indemnification Procedures**

The procedures set forth below must apply to all indemnity obligations under this Contract.

- (a) After the State receives notice of the action or proceeding involving a claim for which it will seek indemnification, the State must promptly notify Contractor of the claim in writing and take or assist Contractor in taking, as the case may be, any reasonable action to avoid the imposition of a default judgment against Contractor. No failure to notify the Contractor relieves the Contractor of its indemnification obligations except to the extent that the Contractor can prove damages attributable to the failure. Within 10 days following receipt of written notice from the State relating to any claim, the Contractor must notify the State in writing whether Contractor agrees to assume control of the defense and settlement of that claim (a "Notice of Election"). After notifying Contractor of a claim and before the State receiving Contractor's Notice of Election, the State is entitled to defend against the claim, at the Contractor's expense, and the Contractor will be responsible for any reasonable costs incurred by the State in defending against the claim during that period.
- (b) If Contractor delivers a Notice of Election relating to any claim: (i) the State is entitled to participate in the defense of the claim and to employ counsel at its own expense to assist in the handling of the claim and to monitor and advise the State about the status and progress of the defense; (ii) the Contractor must, at the request of the State, demonstrate to the reasonable satisfaction of the State, the Contractor's financial ability to carry out its defense and indemnity obligations under this Contract; (iii) the Contractor must periodically advise the State about the status and progress of the defense and must obtain the prior written approval of the State before entering into any settlement of the claim or ceasing to defend against the claim and (iv) to the extent that any principles of Michigan governmental or public law may be involved or challenged, the State has the right, at its own expense, to control the defense of that portion of the claim involving the principles of Michigan governmental or public law. But the State may retain control of the defense and settlement of a claim by notifying the Contractor in writing within 10 days after the State's receipt of Contractor's information requested by the State under clause (ii) of this paragraph if the State determines that the Contractor has failed to demonstrate to the reasonable satisfaction of the State the Contractor's financial ability to carry out its defense and indemnity obligations under this Section. Any litigation activity on behalf of the State, or any of its subdivisions under this Section, must be coordinated with the Department of Attorney General. In the event the insurer's attorney represents the State under this Section, the insurer's attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.
- (c) If Contractor does not deliver a Notice of Election relating to any claim of which it is notified by the State as provided above, the State may defend the claim in the manner as it may deem appropriate, at the cost and expense of Contractor. If it is determined that the claim was one against which Contractor was required to indemnify the State, upon request of the State, Contractor must promptly reimburse the State for all the reasonable costs and expenses.

### **2.150 Termination/Cancellation**

#### **2.151 Notice and Right to Cure**

If the Contractor breaches the contract, and the State in its sole discretion determines that the breach is curable, then the State will provide the Contractor with written notice of the breach and a time period (not less than 30 days) to cure the Breach. The notice of breach and opportunity to cure is inapplicable for successive or repeated breaches or if the State determines in its sole discretion that the breach poses a serious and imminent threat to the health or safety of any person or the imminent loss, damage, or destruction of any real or tangible personal property.

**2.152 Termination for Cause**

- (a) The State may terminate this contract, for cause, by notifying the Contractor in writing, if the Contractor (i) breaches any of its material duties or obligations under this Contract (including a Chronic Failure to meet any particular SLA), or (ii) fails to cure a breach within the time period specified in the written notice of breach provided by the State
- (b) If this Contract is terminated for cause, the Contractor must pay all costs incurred by the State in terminating this Contract, including but not limited to, State administrative costs, reasonable attorneys' fees and court costs, and any reasonable additional costs the State may incur to procure the Services/Deliverables required by this Contract from other sources. Re-procurement costs are not consequential, indirect or incidental damages, and cannot be excluded by any other terms otherwise included in this Contract, provided the costs are not in excess of 50% more than the prices for the Service/Deliverables provided under this Contract.
- (c) If the State chooses to partially terminate this Contract for cause, charges payable under this Contract will be equitably adjusted to reflect those Services/Deliverables that are terminated and the State must pay for all Services/Deliverables for which Final Acceptance has been granted provided up to the termination date. Services and related provisions of this Contract that are terminated for cause must cease on the effective date of the termination.
- (d) If the State terminates this Contract for cause under this Section, and it is determined, for any reason, that Contractor was not in breach of contract under the provisions of this section, that termination for cause must be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties must be limited to that otherwise provided in this Contract for a termination for convenience.

**2.153 Termination for Convenience**

The State may terminate this Contract for its convenience, in whole or part, if the State determines that a termination is in the State's best interest. Reasons for the termination must be left to the sole discretion of the State and may include, but not necessarily be limited to (a) the State no longer needs the Services or products specified in the Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Services no longer practical or feasible, (c) unacceptable prices for Additional Services or New Work requested by the State, or (d) falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the State. The State may terminate this Contract for its convenience, in whole or in part, by giving Contractor written notice at least 30 days before the date of termination. If the State chooses to terminate this Contract in part, the charges payable under this Contract must be equitably adjusted to reflect those Services/Deliverables that are terminated. Services and related provisions of this Contract that are terminated for cause must cease on the effective date of the termination.

**2.154 Termination for Non-Appropriation**

- (a) Contractor acknowledges that, if this Contract extends for several fiscal years, continuation of this Contract is subject to appropriation or availability of funds for this Contract. If funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available, the State must terminate this Contract and all affected Statements of Work, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The State must give Contractor at least 30 days advance written notice of termination for non-appropriation or unavailability (or the time as is available if the State receives notice of the final decision less than 30 days before the funding cutoff).
- (b) If funding for the Contract is reduced by law, or funds to pay Contractor for the agreed-to level of the Services or production of Deliverables to be provided by Contractor are not appropriated or otherwise unavailable, the State may, upon 30 days written notice to Contractor, reduce the level of the Services or the change the production of Deliverables in the manner and for the periods of time as the State may elect. The charges payable under this Contract will be equitably adjusted to reflect any equipment, services or commodities not provided by reason of the reduction.
- (c) If the State terminates this Contract, eliminates certain Deliverables, or reduces the level of Services to be provided by Contractor under this Section, the State must pay Contractor for all Work-in-Process



performed through the effective date of the termination or reduction in level, as the case may be and as determined by the State, to the extent funds are available. This Section will not preclude Contractor from reducing or stopping Services/Deliverables or raising against the State in a court of competent jurisdiction, any claim for a shortfall in payment for Services performed or Deliverables finally accepted before the effective date of termination.

### **2.155 Termination for Criminal Conviction**

The State may terminate this Contract immediately and without further liability or penalty in the event Contractor, an officer of Contractor, or an owner of a 25% or greater share of Contractor is convicted of a criminal offense related to a State, public or private Contract or subcontract.

### **2.156 Termination for Approvals Rescinded**

The State may terminate this Contract if any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services under Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. In that case, the State will pay the Contractor for only the work completed to that point under the Contract. Termination may be in whole or in part and may be immediate as of the date of the written notice to Contractor or may be effective as of the date stated in the written notice.

### **2.157 Rights and Obligations upon Termination**

- (a) If the State terminates this Contract for any reason, the Contractor must (a) stop all work as specified in the notice of termination, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Deliverables or other property derived or resulting from this Contract that may be in Contractor's possession, (c) return all materials and property provided directly or indirectly to Contractor by any entity, agent or employee of the State, (d) transfer title in, and deliver to, the State, unless otherwise directed, all Deliverables intended to be transferred to the State at the termination of the Contract and which are resulting from the Contract (which must be provided to the State on an "As-Is" basis except to the extent the amounts paid by the State in respect of the items included compensation to Contractor for the provision of warranty services in respect of the materials), and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or termination settlement costs, to the maximum practical extent, including terminating or limiting as otherwise applicable those subcontracts and outstanding orders for material and supplies resulting from the terminated Contract.
- (b) If the State terminates this Contract before its expiration for its own convenience, the State must pay Contractor for all charges due for Services provided before the date of termination and, if applicable, as a separate item of payment under this Contract, for Work In Process, on a percentage of completion basis at the level of completion determined by the State. All completed or partially completed Deliverables prepared by Contractor under this Contract, at the option of the State, becomes the State's property, and Contractor is entitled to receive equitable fair compensation for the Deliverables. Regardless of the basis for the termination, the State is not obligated to pay, or otherwise compensate, Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.
- (c) Upon a good faith termination, the State may assume, at its option, any subcontracts and agreements for services and deliverables provided under this Contract, and may further pursue completion of the Services/Deliverables under this Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.

### **2.158 Reservation of Rights**

Any termination of this Contract or any Statement of Work issued under it by a party must be with full reservation of, and without prejudice to, any rights or remedies otherwise available to the party with respect to any claims arising before or as a result of the termination.



## **2.160 Termination by Contractor**

### **2.161 Termination by Contractor**

If the State breaches the Contract, and the Contractor in its sole discretion determines that the breach is curable, then the Contractor will provide the State with written notice of the breach and a time period (not less than 30 days) to cure the breach. The Notice of Breach and opportunity to cure is inapplicable for successive and repeated breaches.

The Contractor may terminate this Contract if the State (i) materially breaches its obligation to pay the Contractor undisputed amounts due and owing under this Contract, (ii) breaches its other obligations under this Contract to an extent that makes it impossible or commercially impractical for the Contractor to perform the Services, or (iii) does not cure the breach within the time period specified in a written notice of breach. But the Contractor must discharge its obligations under **Section 2.160** before it terminates the Contract.

## **2.170 Transition Responsibilities**

### **2.171 Contractor Transition Responsibilities**

If the State terminates this contract, for convenience or cause, or if the Contract is otherwise dissolved, voided, rescinded, nullified, expires or rendered unenforceable, the Contractor agrees to comply with direction provided by the State to assist in the orderly transition of equipment, services, software, leases, etc. to the State or a third party designated by the State. If this Contract expires or terminates, the Contractor agrees to make all reasonable efforts to effect an orderly transition of services within a reasonable period of time that in no event will exceed **90 days**. These efforts must include, but are not limited to, those listed in **Sections 2.141, 2.142, 2.143, 2.144, and 2.145**.

### **2.172 Contractor Personnel Transition**

The Contractor must work with the State, or a specified third party, to develop a transition plan setting forth the specific tasks and schedule to be accomplished by the parties, to effect an orderly transition. The Contractor must allow as many personnel as practicable to remain on the job to help the State, or a specified third party, maintain the continuity and consistency of the services required by this Contract. In addition, during or following the transition period, in the event the State requires the Services of the Contractor's subcontractors or vendors, as necessary to meet its needs, Contractor agrees to reasonably, and with good-faith, work with the State to use the Services of Contractor's subcontractors or vendors. Contractor will notify all of Contractor's subcontractors of procedures to be followed during transition.

### **2.173 Contractor Information Transition**

The Contractor agrees to provide reasonable detailed specifications for all Services/Deliverables needed by the State, or specified third party, to properly provide the Services/Deliverables required under this Contract. The Contractor will provide the State with asset management data generated from the inception of this Contract through the date on which this Contractor is terminated in a comma-delineated format unless otherwise requested by the State. The Contractor will deliver to the State any remaining owed reports and documentation still in Contractor's possession subject to appropriate payment by the State.

### **2.174 Contractor Software Transition**

The Contractor must reasonably assist the State in the acquisition of any Contractor software required to perform the Services/use the Deliverables under this Contract. This must include any documentation being used by the Contractor to perform the Services under this Contract. If the State transfers any software licenses to the Contractor, those licenses must, upon expiration of the Contract, transfer back to the State at their current revision level. Upon notification by the State, Contractor may be required to freeze all non-critical changes to Deliverables/Services.

### **2.175 Transition Payments**

If the transition results from a termination for any reason, the termination provisions of this Contract must govern reimbursement. If the transition results from expiration, the Contractor will be reimbursed for all



reasonable transition costs (i.e. costs incurred within the agreed period after contract expiration that result from transition operations) at the rates agreed upon by the State. The Contractor will prepare an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

### **2.176 State Transition Responsibilities**

In the event that this Contract is terminated, dissolved, voided, rescinded, nullified, or otherwise rendered unenforceable, the State agrees to reconcile all accounts between the State and the Contractor, complete any pending post-project reviews and perform any others obligations upon which the State and the Contractor agree.

- (a) Reconciling all accounts between the State and the Contractor;
- (b) Completing any pending post-project reviews.

### **2.180 Stop Work**

#### **2.181 Stop Work Orders**

The State may, at any time, by written stop work order to Contractor, require that Contractor stop all, or any part, of the work called for by the Contract for a period of up to 90 calendar days after the stop work order is delivered to Contractor, and for any further period to which the parties may agree. The stop work order must be identified as a stop work order and must indicate that it is issued under this **Section 2.150**. Upon receipt of the stop work order, Contractor must immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the stop work order during the period of work stoppage. Within the period of the stop work order, the State must either: (a) cancel the stop work order; or (b) terminate the work covered by the stop work order as provided in **Section 2.130**.

#### **2.182 Cancellation or Expiration of Stop Work Order**

The Contractor must resume work if the State cancels a Stop Work Order or if it expires. The parties will agree upon an equitable adjustment in the delivery schedule, the Contract price, or both, and the Contract must be modified, in writing, accordingly, if: (a) the stop work order results in an increase in the time required for, or in Contractor's costs properly allocable to, the performance of any part of the Contract; and (b) Contractor asserts its right to an equitable adjustment within 30 calendar days after the end of the period of work stoppage; provided that, if the State decides the facts justify the action, the State may receive and act upon a Contractor proposal submitted at any time before final payment under the Contract. Any adjustment will conform to the requirements of **Section 2.024**.

#### **2.183 Allowance of Contractor Costs**

If the stop work order is not canceled and the work covered by the stop work order is terminated for reasons other than material breach, the termination must be deemed to be a termination for convenience under **Section 2.153**, and the State will pay reasonable costs resulting from the stop work order in arriving at the termination settlement. For the avoidance of doubt, the State is not liable to Contractor for loss of profits because of a stop work order issued under this Section.

### **2.190 Dispute Resolution**

#### **2.191 In General**

Any claim, counterclaim, or dispute between the State and Contractor arising out of or relating to the Contract or any Statement of Work must be resolved as follows. For all Contractor claims seeking an increase in the amounts payable to Contractor under the Contract, or the time for Contractor's performance, Contractor must submit a letter, together with all data supporting the claims, executed by Contractor's Contract Administrator or the Contract Administrator's designee certifying that (a) the claim is made in good faith, (b) the amount claimed accurately reflects the adjustments in the amounts payable to Contractor or the time for Contractor's performance for which Contractor believes the State is liable and covers all costs of every type to which Contractor is entitled from the occurrence of the claimed event, and (c) the claim and the supporting data are current and complete to Contractor's best knowledge and belief.



### **2.192 Informal Dispute Resolution**

- (a) All disputes between the parties must be resolved under the Contract Management procedures in this Contract. If the parties are unable to resolve any disputes after compliance with the processes, the parties must meet with the Director of Purchasing Operations, DMB, or designee, for the purpose of attempting to resolve the dispute without the need for formal legal proceedings, as follows:
- (1) The representatives of Contractor and the State must meet as often as the parties reasonably deem necessary to gather and furnish to each other all information with respect to the matter in issue which the parties believe to be appropriate and germane in connection with its resolution. The representatives must discuss the problem and negotiate in good faith in an effort to resolve the dispute without the necessity of any formal proceeding.
  - (2) During the course of negotiations, all reasonable requests made by one party to another for non-privileged information reasonably related to the Contract will be honored in order that each of the parties may be fully advised of the other's position.
  - (3) The specific format for the discussions will be left to the discretion of the designated State and Contractor representatives, but may include the preparation of agreed upon statements of fact or written statements of position.
  - (4) Following the completion of this process within 60 calendar days, the Director of Purchasing Operations, DMB, or designee, must issue a written opinion regarding the issue(s) in dispute within 30 calendar days. The opinion regarding the dispute must be considered the State's final action and the exhaustion of administrative remedies.
- (b) This Section will not be construed to prevent either party from instituting, and a party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period, to preserve a superior position with respect to other creditors, or under **Section 2.193**.
- (c) The State will not mediate disputes between the Contractor and any other entity, except state agencies, concerning responsibility for performance of work under the Contract.

### **2.193 Injunctive Relief**

The only circumstance in which disputes between the State and Contractor will not be subject to the provisions of **Section 2.192** is where a party makes a good faith determination that a breach of the terms of the Contract by the other party is the that the damages to the party resulting from the breach will be so immediate, so large or severe and so incapable of adequate redress after the fact that a temporary restraining order or other immediate injunctive relief is the only adequate remedy.

### **2.194 Continued Performance**

Each party agrees to continue performing its obligations under the Contract while a dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment must not be deemed to preclude performance) and without limiting either party's right to terminate the Contract as provided in **Section 2.150**, as the case may be.

## **2.200 Federal and State Contract Requirements**

### **2.201 Nondiscrimination**

In the performance of the Contract, Contractor agrees not to discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, physical or mental disability. Contractor further agrees that every subcontract entered into for the performance of this Contract or any purchase order resulting from this Contract will contain a provision requiring non-discrimination in employment, as specified here, binding upon each Subcontractor. This covenant is required under the Elliot Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., and any breach of this provision may be regarded as a material breach of the Contract.



### **2.202 Unfair Labor Practices**

Under 1980 PA 278, MCL 423.321, et seq., the State must not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled under section 2 of the Act. This information is compiled by the United States National Labor Relations Board. A Contractor of the State, in relation to the Contract, must not enter into a contract with a Subcontractor, manufacturer, or supplier whose name appears in this register. Under section 4 of 1980 PA 278, MCL 423.324, the State may void any Contract if, after award of the Contract, the name of Contractor as an employer or the name of the Subcontractor, manufacturer or supplier of Contractor appears in the register.

### **2.203 Workplace Safety and Discriminatory Harassment**

In performing Services for the State, the Contractor must comply with the Department of Civil Services Rule 2-20 regarding Workplace Safety and Rule 1-8.3 regarding Discriminatory Harassment. In addition, the Contractor must comply with Civil Service regulations and any applicable agency rules provided to the Contractor. For Civil Service Rules, see <http://www.mi.gov/mdcs/0,1607,7-147-6877---,00.html>.

### **2.210 Governing Law**

#### **2.211 Governing Law**

The Contract must in all respects be governed by, and construed according to, the substantive laws of the State of Michigan without regard to any Michigan choice of law rules that would apply the substantive law of any other jurisdiction to the extent not inconsistent with, or pre-empted by federal law.

#### **2.212 Compliance with Laws**

Contractor shall comply with all applicable state, federal and local laws and ordinances in providing the Services/Deliverables.

#### **2.213 Jurisdiction**

Any dispute arising from the Contract must be resolved in the State of Michigan. With respect to any claim between the parties, Contractor consents to venue in Ingham County, Michigan, and irrevocably waives any objections it may have to the jurisdiction on the grounds of lack of personal jurisdiction of the court or the laying of venue of the court or on the basis of forum non convenienc or otherwise. Contractor agrees to appoint agents in the State of Michigan to receive service of process.

### **2.220 Limitation of Liability**

#### **2.221 Limitation of Liability**

Neither the Contractor nor the State is liable to each other, regardless of the form of action, for consequential, incidental, indirect, or special damages. This limitation of liability does not apply to claims for infringement of United States patent, copyright, trademark or trade secrets; to claims for personal injury or damage to property caused by the gross negligence or willful misconduct of the Contractor; to claims covered by other specific provisions of this Contract calling for liquidated damages; or to court costs or attorney's fees awarded by a court in addition to damages after litigation based on this Contract.

The Contractor's liability for damages to the State is limited to two times the value of the Contract or \$500,000 which ever is higher. The foregoing limitation of liability does not apply to claims for infringement of United States patent, copyright, trademarks or trade secrets; to claims for personal injury or damage to property caused by the gross negligence or willful misconduct of the Contractor; to claims covered by other specific provisions of this Contract calling for liquidated damages; or to court costs or attorney's fees awarded by a court in addition to damages after litigation based on this Contract.

The State's liability for damages to the Contractor is limited to the value of the Contract.



## **2.230 Disclosure Responsibilities**

### **2.231 Disclosure of Litigation**

Contractor must disclose any material criminal litigation, investigations or proceedings involving the Contractor (and each Subcontractor) or any of its officers or directors or any litigation, investigations or proceedings under the Sarbanes-Oxley Act. In addition, each Contractor (and each Subcontractor) must notify the State of any material civil litigation, arbitration or proceeding which arises during the term of the Contract and extensions, to which Contractor (or, to the extent Contractor is aware, any Subcontractor) is a party, and which involves: (i) disputes that might reasonably be expected to adversely affect the viability or financial stability of Contractor or any Subcontractor; or (ii) a claim or written allegation of fraud against Contractor or, to the extent Contractor is aware, any Subcontractor by a governmental or public entity arising out of their business dealings with governmental or public entities. The Contractor must disclose in writing to the Contract Administrator any litigation, investigation, arbitration or other proceeding (collectively, "Proceeding") within 30 days of its occurrence. Details of settlements that are prevented from disclosure by the terms of the settlement may be annotated. Information provided to the State from Contractor's publicly filed documents referencing its material litigation will be deemed to satisfy the requirements of this Section.

If any Proceeding disclosed to the State under this Section, or of which the State otherwise becomes aware, during the term of this Contract would cause a reasonable party to be concerned about:

- (a) the ability of Contractor (or a Subcontractor) to continue to perform this Contract according to its terms and conditions, or
- (b) whether Contractor (or a Subcontractor) in performing Services for the State is engaged in conduct which is similar in nature to conduct alleged in the Proceeding, which conduct would constitute a breach of this Contract or a violation of Michigan law, regulations or public policy, then the Contractor must provide the State all reasonable assurances requested by the State to demonstrate that:
  - (1) Contractor and its Subcontractors will be able to continue to perform this Contract and any Statements of Work according to its terms and conditions, and
  - (2) Contractor and its Subcontractors have not and will not engage in conduct in performing the Services which is similar in nature to the conduct alleged in the Proceeding.
- (c) Contractor must make the following notifications in writing:
  - (1) Within 30 days of Contractor becoming aware that a change in its ownership or officers has occurred, or is certain to occur, or a change that could result in changes in the valuation of its capitalized assets in the accounting records, Contractor must notify DMB Purchasing Operations.
  - (2) Contractor must also notify DMB Purchasing Operations within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership or officers.
  - (3) Contractor must also notify DMB Purchase Operations within 30 days whenever changes to company affiliations occur.

### **2.232 Call Center Disclosure**

Contractor and/or all subcontractors involved in the performance of this Contract providing call or contact center services to the State must disclose the location of its call or contact center services to inbound callers. Failure to disclose this information is a material breach of this Contract.

### **2.233 Bankruptcy**

The State may, without prejudice to any other right or remedy, terminate this Contract, in whole or in part, and, at its option, may take possession of the "Work in Process" and finish the Works in Process by whatever appropriate method the State may deem expedient if:

- (a) the Contractor files for protection under the bankruptcy laws;
- (b) an involuntary petition is filed against the Contractor and not removed within 30 days;
- (c) the Contractor becomes insolvent or if a receiver is appointed due to the Contractor's insolvency;
- (d) the Contractor makes a general assignment for the benefit of creditors; or
- (e) the Contractor or its affiliates are unable to provide reasonable assurances that the Contractor or its affiliates can deliver the services under this Contract.



Contractor will fix appropriate notices or labels on the Work in Process to indicate ownership by the State. To the extent reasonably possible, materials and Work in Process must be stored separately from other stock and marked conspicuously with labels indicating ownership by the State.

## **2.240 Performance**

### **2.241 Time of Performance**

- (a) Contractor must use commercially reasonable efforts to provide the resources necessary to complete all Services and Deliverables according to the time schedules contained in the Statements of Work and other Exhibits governing the work, and with professional quality.
- (b) Without limiting the generality of **Section 2.241**, Contractor must notify the State in a timely manner upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely and successful completion of any Deliverables/Services on the scheduled due dates in the latest State-approved delivery schedule and must inform the State of the projected actual delivery date.
- (c) If the Contractor believes that a delay in performance by the State has caused or will cause the Contractor to be unable to perform its obligations according to specified Contract time periods, the Contractor must notify the State in a timely manner and must use commercially reasonable efforts to perform its obligations according to the Contract time periods notwithstanding the State's failure. Contractor will not be in default for a delay in performance to the extent the delay is caused by the State.

### **2.242 Service Level Agreement (SLA)**

- (a) SLAs will be completed with the following operational considerations:
  - (1) SLAs will not be calculated for individual Incidents where any event of Excusable Failure has been determined; Incident means any interruption in Services.
  - (2) SLAs will not be calculated for individual Incidents where loss of service is planned and where the State has received prior notification or coordination.
  - (3) SLAs will not apply if the applicable Incident could have been prevented through planning proposed by Contractor and not implemented at the request of the State. To invoke this consideration, complete documentation relevant to the denied planning proposal must be presented to substantiate the proposal.
  - (4) Time period measurements will be based on the time Incidents are received by the Contractor and the time that the State receives notification of resolution based on 24x7x365 time period, except that the time period measurement will be suspended based on the following:
    - (i) Time period(s) will not apply where Contractor does not have access to a physical State Location and where access to the State Location is necessary for problem identification and resolution.
    - (ii) Time period(s) will not apply where Contractor needs to obtain timely and accurate information or appropriate feedback and is unable to obtain timely and accurate information or appropriate feedback from the State.
- (b) Chronic Failure for any Service(s) will be defined as three unscheduled outage(s) or interruption(s) on any individual Service for the same reason or cause or if the same reason or cause was reasonably discoverable in the first instance over a rolling 30 day period. Chronic Failure will result in the State's option to terminate the effected individual Service(s) and procure them from a different vendor for the chronic location(s) with Contractor to pay the difference in charges for up to three additional months. The termination of the Service will not affect any tiered pricing levels.
- (c) Root Cause Analysis will be performed on any Business Critical outage(s) or outage(s) on Services when requested by the Contract Administrator. Contractor will provide its analysis within two weeks of outage(s) and provide a recommendation for resolution.
- (d) All decimals must be rounded to two decimal places with five and greater rounding up and four and less rounding down unless otherwise specified.



### **2.243 Liquidated Damages**

#### ***Unauthorized Removal of any Key Personnel***

It is acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 2.141**, the State may assess liquidated damages against Contractor as specified below.

For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the liquidated damages amount is \$25,000.00 per individual if the Contractor identifies a replacement approved by the State under **Section 2.060** and assigns the replacement to the Project to shadow the Key Personnel who is leaving for a period of at least 30 days before the Key Personnel's removal.

If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least 30 days, in addition to the \$25,000.00 liquidated damages for an Unauthorized Removal, Contractor must pay the amount of \$833.33 per day for each day of the 30 day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to \$25,000.00 maximum per individual. The total liquidated damages that may be assessed per Unauthorized Removal and failure to provide 30 days of shadowing must not exceed \$50,000.00 per individual. Additionally to the above (***Unauthorized Removal of any Key Personnel***) to keep the project on schedule, both parties agree the following conditions: For each project phase, if the schedule has been delayed for more than 10 days and enfoTech is at fault for the delay, SOM will have the option to notify enfoTech its intention to assess liquidated damage for up to 2% of the cost for that phase. SOM will have the option to exercise the liquidated damage if enfoTech fails to meet the MAERS-Facility (electronic NEI submission from the facility) for the Dec 1, 2010 reporting period. If enfoTech meets the MAERS-Facility Dec 1, 2010 reporting period, all previous liquidated damage notifications will be void. The total maximum liquidated damage will not exceed 2% of the total project cost for Phase 1 to VI.

If SOM causes delay for completing the deliverables, SOM shall provide reasonable time extension to enfoTech, as mutually agreed by SOM and enfoTech, to readjust the project schedule.

### **2.244 Excusable Failure**

Neither party will be liable for any default, damage or delay in the performance of its obligations under the Contract to the extent the default, damage or delay is caused by government regulations or requirements (executive, legislative, judicial, military or otherwise), power failure, electrical surges or current fluctuations, lightning, earthquake, war, water or other forces of nature or acts of God, delays or failures of transportation, equipment shortages, suppliers' failures, or acts or omissions of common carriers, fire; riots, civil disorders; strikes or other labor disputes, embargoes; injunctions (provided the injunction was not issued as a result of any fault or negligence of the party seeking to have its default or delay excused); or any other cause beyond the reasonable control of a party; provided the non-performing party and its Subcontractors are without fault in causing the default or delay, and the default or delay could not have been prevented by reasonable precautions and cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means, including disaster recovery plans.

If a party does not perform its contractual obligations for any of the reasons listed above, the non-performing party will be excused from any further performance of its affected obligation(s) for as long as the circumstances prevail. But the party must use commercially reasonable efforts to recommence performance whenever and to whatever extent possible without delay. A party must promptly notify the other party in writing immediately after the excusable failure occurs, and also when it abates or ends.

If any of the above-enumerated circumstances substantially prevent, hinder, or delay the Contractor's performance of the Services/provision of Deliverables for more than 10 Business Days, and the State determines that performance is not likely to be resumed within a period of time that is satisfactory to the State



in its reasonable discretion, then at the State's option: (a) the State may procure the affected Services/Deliverables from an alternate source, and the State is not be liable for payment for the unperformed Services/ Deliverables not provided under the Contract for so long as the delay in performance continues; (b) the State may terminate any portion of the Contract so affected and the charges payable will be equitably adjusted to reflect those Services/Deliverables terminated; or (c) the State may terminate the affected Statement of Work without liability to Contractor as of a date specified by the State in a written notice of termination to the Contractor, except to the extent that the State must pay for Services/Deliverables provided through the date of termination.

The Contractor will not have the right to any additional payments from the State as a result of any Excusable Failure occurrence or to payments for Services not rendered/Deliverables not provided as a result of the Excusable Failure condition. Defaults or delays in performance by Contractor which are caused by acts or omissions of its Subcontractors will not relieve Contractor of its obligations under the Contract except to the extent that a Subcontractor is itself subject to an Excusable Failure condition described above and Contractor cannot reasonably circumvent the effect of the Subcontractor's default or delay in performance through the use of alternate sources, workaround plans or other means.

### **2.250 Approval of Deliverables**

#### **2.251 Delivery of Deliverables**

Deliverables to be prepared and delivered by Contractor including, for each Deliverable, the scheduled delivery date and a designation of whether the Deliverable is a document ("Written Deliverable") or a Custom Software Deliverable. All Deliverables shall be completed and delivered for State review and written approval and, where applicable, installed in accordance with the State-approved delivery schedule and any other applicable terms and conditions of this Contract.

Prior to delivering any Deliverable to the State, Contractor will first perform all required quality assurance activities, and, in the case of Custom Software Deliverables, System Testing to verify that the Deliverable is complete and in conformance with its specifications. Before delivering a Deliverable to the State, Contractor shall certify to the State that (1) it has performed such quality assurance activities, (2) it has performed any applicable testing, (3) it has corrected all material deficiencies discovered during such quality assurance activities and testing, (4) the Deliverable is in a suitable state of readiness for the State's review and approval, and (5) the Deliverable/Service has all Critical Security patches/updates applied.

In discharging its obligations under this Section, Contractor shall be at all times (except where the parties agree otherwise in writing) in compliance with Level 3 of the Software Engineering Institute's Capability Maturity Model for Software ("CMM Level 3") or its equivalent.

#### **2.252 Contractor System Testing**

Contractor will be responsible for System Testing each Custom Software Deliverable in Contractor's development environment prior to turning over the Custom Software Deliverable to the State for User Acceptance Testing and approval. Contractor's System Testing shall include the following, at a minimum, plus any other testing required by CMM Level 3 or Contractor's system development methodology:

Contractor will be responsible for performing Unit Testing and incremental Integration Testing of the components of each Custom Software Deliverable.

Contractor's System Testing will also include Integration Testing of each Custom Software Deliverable to ensure proper inter-operation with all prior software Deliverables, interfaces and other components that are intended to inter-operate with such Custom Software Deliverable, and will include Regression Testing, volume and stress testing to ensure that the Custom Software Deliverables are able to meet the State's projected growth in the number and size of transactions to be processed by the Application and number of users, as such projections are set forth in the applicable Statement of Work.



Contractor's System Testing will also include Business Function Testing and Technical Testing of each Application in a simulated production environment. Business Function Testing will include testing of full work streams that flow through the Application as the Application will be incorporated within the State's computing environment. The State shall participate in and provide support for the Business Function Testing to the extent reasonably requested by Contractor. Within ten (10) days before the commencement of Business Function Testing pursuant to this Section, Contractor shall provide the State for State review and written approval Contractor's test plan for Business Function Testing.

Within five (5) Business Days following the completion of System Testing pursuant to this **Section**, Contractor shall provide to the State a testing matrix establishing that testing for each condition identified in the System Testing plans has been conducted and successfully concluded. To the extent that testing occurs on State premises, the State shall be entitled to observe or otherwise participate in testing under this Section as the State may elect.

### **2.253 Approval of Deliverables, In General**

All Deliverables (Written Deliverables and Custom Software Deliverables) require formal written approval by the State, in accordance with the following procedures. Formal approval by the State requires that the Deliverable be confirmed in writing by the State to meet its specifications, which, in the case of Custom Software Deliverables, will include the successful completion of State User Acceptance Testing, to be led by the State with the support and assistance of Contractor. The parties acknowledge that the approval process set forth herein will be facilitated by ongoing consultation between the parties, visibility of interim and intermediate Deliverables and collaboration on key decisions.

The State's obligation to comply with any State Review Period is conditioned on the timely delivery of Deliverables being reviewed. If Contractor fails to provide a Deliverable to the State in a timely manner, the State will nevertheless use commercially reasonable efforts to complete its review or testing within the applicable State Review Period.

Before commencement of its review or testing of a Deliverable, the State may inspect the Deliverable to confirm that all components of the Deliverable (e.g., software, associated documentation, and other materials) have been delivered. If the State determines that the Deliverable is incomplete, the State may refuse delivery of the Deliverable without performing any further inspection or testing of the Deliverable. Otherwise, the review period will be deemed to have started on the day the State receives the Deliverable and the applicable certification by Contractor in accordance with this Section.

The State will approve in writing a Deliverable upon confirming that it conforms to and, in the case of a Custom Software Deliverable, performs in accordance with, its specifications without material deficiency. The State may, but shall not be required to, conditionally approve in writing a Deliverable that contains material deficiencies if the State elects to permit Contractor to rectify them post-approval. In any case, Contractor will be responsible for working diligently to correct within a reasonable time at Contractor's expense all deficiencies in the Deliverable that remain outstanding at the time of State approval.

If, after three (3) opportunities (the original and two repeat efforts), Contractor is unable to correct all deficiencies preventing State approval of a Deliverable, the State may: (i) demand that Contractor cure the failure and give Contractor additional time to cure the failure at the sole expense of Contractor; or (ii) keep this Contract in force and do, either itself or through other parties, whatever Contractor has failed to do, in which event Contractor shall bear any excess expenditure incurred by the State in so doing beyond the contract price for such Deliverable and will pay the State an additional sum equal to ten percent (10%) of such excess expenditure to cover the State's general expenses without the need to furnish proof in substantiation of such general expenses; or (iii) terminate this Contract for default, either in whole or in part by notice to Contractor (and without the need to afford Contractor any further opportunity to cure). Notwithstanding the foregoing, the State shall not use, as a basis for exercising its termination rights under this Section, deficiencies discovered in a repeat State Review Period that could reasonably have been discovered during a prior State Review Period.



The State, at any time and in its own discretion, may halt the UAT or approval process if such process reveals deficiencies in or problems with a Deliverable in a sufficient quantity or of a sufficient severity as to make the continuation of such process unproductive or unworkable. In such case, the State may return the applicable Deliverable to Contractor for correction and re-delivery prior to resuming the review or UAT process and, in that event, Contractor will correct the deficiencies in such Deliverable in accordance with the Contract, as the case may be.

Approval in writing of a Deliverable by the State shall be provisional; that is, such approval shall not preclude the State from later identifying deficiencies in, and declining to accept, a subsequent Deliverable based on or which incorporates or inter-operates with an approved Deliverable, to the extent that the results of subsequent review or testing indicate the existence of deficiencies in the subsequent Deliverable, or if the Application of which the subsequent Deliverable is a component otherwise fails to be accepted pursuant to **Section 2.080**.

#### **2.254 Process for Approval of Written Deliverables**

The State Review Period for Written Deliverables will be the number of days set forth in the applicable Statement of Work following delivery of the final version of the Written Deliverable (failing which the State Review Period, by default, shall be five (5) Business Days for Written Deliverables of one hundred (100) pages or less and ten (10) Business Days for Written Deliverables of more than one hundred (100) pages). The duration of the State Review Periods will be doubled if the State has not had an opportunity to review an interim draft of the Written Deliverable prior to its submission to the State. The State agrees to notify Contractor in writing by the end of the State Review Period either stating that the Written Deliverable is approved in the form delivered by Contractor or describing any deficiencies that must be corrected prior to approval of the Written Deliverable (or at the State's election, subsequent to approval of the Written Deliverable). If the State delivers to Contractor a notice of deficiencies, Contractor will correct the described deficiencies and within five (5) Business Days resubmit the Deliverable in a form that shows all revisions made to the original version delivered to the State. Contractor's correction efforts will be made at no additional charge. Upon receipt of a corrected Written Deliverable from Contractor, the State will have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Written Deliverable to confirm that the identified deficiencies have been corrected.

#### **2.255 Process for Approval of Custom Software Deliverables**

The State will conduct UAT of each Custom Software Deliverable in accordance with the following procedures to determine whether it meets the criteria for State approval – i.e., whether it conforms to and performs in accordance with its specifications without material deficiencies.

Within thirty (30) days (or such other number of days as the parties may agree to in writing) prior to Contractor's delivery of any Custom Software Deliverable to the State for approval, Contractor shall provide to the State a set of proposed test plans, including test cases, scripts, data and expected outcomes, for the State's use (which the State may supplement in its own discretion) in conducting UAT of the Custom Software Deliverable. Contractor, upon request by the State, shall provide the State with reasonable assistance and support during the UAT process.

For the Custom Software Deliverables listed in **Exhibit C**, the State Review Period for conducting UAT will be as indicated in **Exhibit C**. For any other Custom Software Deliverables not listed in **Exhibit C**, the State Review Period shall be the number of days agreed in writing by the parties (failing which it shall be forty-five (45) days by default). The State Review Period for each Custom Software Deliverable will begin when Contractor has delivered the Custom Software Deliverable to the State accompanied by the certification required by this **Section** and the State's inspection of the Deliverable has confirmed that all components of it have been delivered.

The State's UAT will consist of executing test scripts from the proposed testing submitted by Contractor, but may also include any additional testing deemed appropriate by the State. If the State determines during the UAT that the Custom Software Deliverable contains any deficiencies, the State will notify Contractor of the



deficiency by making an entry in an incident reporting system available to both Contractor and the State. Contractor will modify promptly the Custom Software Deliverable to correct the reported deficiencies, conduct appropriate System Testing (including, where applicable, Regression Testing) to confirm the proper correction of the deficiencies and re-deliver the corrected version to the State for re-testing in UAT. Contractor will coordinate the re-delivery of corrected versions of Custom Software Deliverables with the State so as not to disrupt the State's UAT process. The State will promptly re-test the corrected version of the Software Deliverable after receiving it from Contractor.

Within three (3) business days after the end of the State Review Period, the State will give Contractor a written notice indicating the State's approval or rejection of the Custom Software Deliverable according to the criteria and process set out in this **Section**.

### **2.256 Final Acceptance Reserved see section 1.502 Final Acceptance**

### **2.260 Ownership**

#### **2.261 Ownership of Work Product by State**

The State owns all Deliverables, as they are work made for hire by the Contractor for the State. The State owns all United States and international copyrights, trademarks, patents or other proprietary rights in the Deliverables. Enfotech has the right to use the works and deliverables for future business opportunities.

#### **2.262 Vesting of Rights**

With the sole exception of any preexisting licensed works identified in the SOW, the Contractor assigns, and upon creation of each Deliverable automatically assigns, to the State, ownership of all United States and international copyrights, trademarks, patents, or other proprietary rights in each and every Deliverable, whether or not registered by the Contractor, insofar as any the Deliverable, by operation of law, may not be considered work made for hire by the Contractor for the State. From time to time upon the State's request, the Contractor must confirm the assignment by execution and delivery of the assignments, confirmations of assignment, or other written instruments as the State may request. The State may obtain and hold in its own name all copyright, trademark, and patent registrations and other evidence of rights that may be available for Deliverables.

#### **2.263 Rights in Data**

The State is the owner of all data made available by the State to the Contractor or its agents, Subcontractors or representatives under the Contract. The Contractor will not use the State's data for any purpose other than providing the Services, nor will any part of the State's data be disclosed, sold, assigned, leased or otherwise disposed of to the general public or to specific third parties or commercially exploited by or on behalf of the Contractor. No employees of the Contractor, other than those on a strictly need-to-know basis, have access to the State's data. Contractor will not possess or assert any lien or other right against the State's data. Without limiting the generality of this Section, the Contractor must only use personally identifiable information as strictly necessary to provide the Services and must disclose the information only to its employees who have a strict need-to-know the information. The Contractor must comply at all times with all laws and regulations applicable to the personally identifiable information.

The State is the owner of all State-specific data under the Contract. The State may use the data provided by the Contractor for any purpose. The State will not possess or assert any lien or other right against the Contractor's data. Without limiting the generality of this Section, the State may use personally identifiable information only as strictly necessary to utilize the Services and must disclose the information only to its employees who have a strict need to know the information, except as provided by law. The State must comply at all times with all laws and regulations applicable to the personally identifiable information. Other material developed and provided to the State remains the State's sole and exclusive property.



### **2.264 Ownership of Materials**

The State and the Contractor will continue to own their respective proprietary technologies developed before entering into the Contract. Any hardware bought through the Contractor by the State, and paid for by the State, will be owned by the State. Any software licensed through the Contractor and sold to the State, will be licensed directly to the State.

### **2.270 State Standards**

#### **2.271 Existing Technology Standards**

The Contractor will adhere to all existing standards as described within the comprehensive listing of the State's existing technology standards at <http://www.michigan.gov/dit>.

#### **2.272 Acceptable Use Policy**

To the extent that Contractor has access to the State computer system, Contractor must comply with the State's Acceptable Use Policy, see <http://www.michigan.gov/ditservice>. All Contractor employees must be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State system. The State reserves the right to terminate Contractor's access to the State system if a violation occurs.

#### **2.273 Systems Changes**

Contractor is not responsible for and not authorized to make changes to any State systems without written authorization from the Project Manager. Any changes Contractor makes to State systems with the State's approval must be done according to applicable State procedures, including security, access and configuration management procedures.

### **2.280 Extended Purchasing (Reserved)**

#### **2.282 State Employee Purchases (Reserved)**

### **2.290 Environmental Provision**

#### **2.291 Environmental Provision**

**Energy Efficiency Purchasing Policy:** The State seeks wherever possible to purchase energy efficient products. This includes giving preference to U.S. Environmental Protection Agency (EPA) certified 'Energy Star' products for any category of products for which EPA has established Energy Star certification. For other purchases, the State may include energy efficiency as one of the priority factors to consider when choosing among comparable products.

**Environmental Purchasing Policy:** The State of Michigan is committed to encouraging the use of products and services that impact the environment less than competing products. The State is accomplishing this by including environmental considerations in purchasing decisions, while remaining fiscally responsible, to promote practices that improve worker health, conserve natural resources, and prevent pollution. Environmental components that are to be considered include: recycled content and recyclables; energy efficiency; and the presence of undesirable materials in the products, especially those toxic chemicals which are persistent and bioaccumulative. The Contractor should be able to supply products containing recycled and environmentally preferable materials that meet performance requirements and is encouraged to offer such products throughout the duration of this Contract. Information on any relevant third party certification (such as Green Seal, Energy Star, etc.) should also be provided.

**Hazardous Materials:** For the purposes of this Section, "Hazardous Materials" is a generic term used to describe asbestos, ACBMs, PCBs, petroleum products, construction materials including paint thinners, solvents, gasoline, oil, and any other material the manufacture, use, treatment, storage, transportation or disposal of which is regulated by the federal, state or local laws governing the protection of the public health, natural resources or the environment. This includes, but is not limited to, materials the as batteries and circuit packs, and other materials that are regulated as (1) "Hazardous Materials" under the Hazardous Materials



Transportation Act, (2) “chemical hazards” under the Occupational Safety and Health Administration standards, (3) “chemical substances or mixtures” under the Toxic Substances Control Act, (4) “pesticides” under the Federal Insecticide Fungicide and Rodenticide Act, and (5) “hazardous wastes” as defined or listed under the Resource Conservation and Recovery Act.

- (a) The Contractor must use, handle, store, dispose of, process, transport and transfer any material considered a Hazardous Material according to all federal, State and local laws. The State must provide a safe and suitable environment for performance of Contractor’s Work. Before the commencement of Work, the State must advise the Contractor of the presence at the work site of any Hazardous Material to the extent that the State is aware of the Hazardous Material. If the Contractor encounters material reasonably believed to be a Hazardous Material and which may present a substantial danger, the Contractor must immediately stop all affected Work, notify the State in writing about the conditions encountered, and take appropriate health and safety precautions.
- (b) Upon receipt of a written notice, the State will investigate the conditions. If (a) the material is a Hazardous Material that may present a substantial danger, and (b) the Hazardous Material was not brought to the site by the Contractor, or does not result in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Materials, the State must order a suspension of Work in writing. The State must proceed to have the Hazardous Material removed or rendered harmless. In the alternative, the State must terminate the affected Work for the State’s convenience.
- (c) Once the Hazardous Material has been removed or rendered harmless by the State, the Contractor must resume Work as directed in writing by the State. Any determination by the Michigan Department of Community Health or the Michigan Department of Environmental Quality that the Hazardous Material has either been removed or rendered harmless is binding upon the State and Contractor for the purposes of resuming the Work. If any incident with Hazardous Material results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Work will not be counted in a time as mutually agreed by the parties.
- (d) If the Hazardous Material was brought to the site by the Contractor, or results in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Material, or from any other act or omission within the control of the Contractor, the Contractor must bear its proportionate share of the delay and costs involved in cleaning up the site and removing and rendering harmless the Hazardous Material according to Applicable Laws to the condition approved by applicable regulatory agency(ies).

**Labeling:** Michigan has a Consumer Products Rule pertaining to labeling of certain products containing volatile organic compounds. For specific details visit [http://www.michigan.gov/deq/0,1607,7-135-3310\\_4108-173523--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3310_4108-173523--,00.html)

**Refrigeration and Air Conditioning:** The Contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

**Environmental Performance:** Waste Reduction Program - Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.).

### **2.300 Deliverables**

#### **2.301 Software**

**Exhibit C** lists the items of software the State is required to purchase for execution the Contract. The list in **Exhibit C** includes all software required to complete the Contract and make the Deliverables operable; if any additional software is required in order for the Deliverables to meet the requirements of this Contract, such software shall be provided to the State by Contractor at no additional charge (except where agreed upon and specified in a Statement of Work or Contract Change Notice). **Exhibit C** also identifies certain items of software to be provided by the State.



### **2.302 Hardware**

**Exhibit B** lists the items of hardware the State is required to purchase for execution the Contract. The list in **Exhibit B** includes all hardware required to complete the Contract and make the Deliverables operable; if any additional hardware is required in order for the Deliverables to meet the requirements of this Contract, such hardware shall be provided to the State by Contractor at no additional charge (except where agreed upon and specified in a Contract Change Notice). **Exhibit B** also identifies certain items of hardware to be provided by the State.

### **2.303 Equipment to be New**

If applicable, all equipment provided under this Contract by Contractor shall be new where Contractor has knowledge regarding whether the equipment is new or assembled from new or serviceable used parts that are like new in performance or has the option of selecting one or the other. Equipment that is assembled from new or serviceable used parts that are like new in performance is acceptable where Contractor does not have knowledge or the ability to select one or other, unless specifically agreed otherwise in writing by the State.

### **2.304 Equipment to be New and Prohibited Products**

The State will not accept salvage, distressed, outdated or discontinued merchandise. Shipping of such merchandise to any State agency, as a result of an order placed against the Contract, shall be considered default by the Contractor of the terms and conditions of the Contract and may result in cancellation of the Contract by the State. The brand and product number offered for all items shall remain consistent for the term of the Contract, unless Purchasing Operations has approved a change order pursuant to **Section 2.024**.

### **2.310 Software Warranties**

#### **2.311 Performance Warranty**

The Contractor represents and warrants that Deliverables, after Final Acceptance, will perform and operate in compliance with the requirements and other standards of performance contained in this Contract (including all descriptions, specifications and drawings made a part of the Contract) for a period of (90) ninety days. In the event of a breach of this warranty, Contractor will promptly correct the affected Deliverable(s) at no charge to the State.

#### **2.312 No Surreptitious Code Warranty**

The Contractor represents and warrants that no copy of licensed Software provided to the State contains or will contain any Self-Help Code or any Unauthorized Code as defined below. This warranty is referred to in this Contract as the "No Surreptitious Code Warranty."

As used in this Contract, "Self-Help Code" means any back door, time bomb, drop dead device, or other software routine designed to disable a computer program automatically with the passage of time or under the positive control of a person other than the licensee of the software. Self-Help Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

As used in this Contract, "Unauthorized Code" means any virus, Trojan horse, spyware, worm or other Software routines or components designed to permit unauthorized access to disable, erase, or otherwise harm software, equipment, or data; or to perform any other such actions. The term Unauthorized Code does not include Self-Help Code. Unauthorized Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.



In addition, Contractor will use up-to-date commercial virus detection software to detect and remove any viruses from any software prior to delivering it to the State.

### **2.313 Calendar Warranty**

The Contractor represents and warrants that all software for which the Contractor either sells or licenses to the State of Michigan and used by the State prior to, during or after the calendar year 2000, includes or shall include, at no added cost to the State, design and performance so the State shall not experience software abnormality and/or the generation of incorrect results from the software, due to date oriented processing, in the operation of the business of the State of Michigan.

The software design, to insure calendar year rollover compatibility, shall include, but is not limited to: data structures (databases, data files, etc.) that provide 4-digit date century; stored data that contain date century recognition, including, but not limited to, data stored in databases and hardware device internal system dates; calculations and program logic (e.g., sort algorithms, calendar generation, event recognition, and all processing actions that use or produce date values) that accommodates same century and multi-century formulas and date values; interfaces that supply data to and receive data from other systems or organizations that prevent non-compliant dates and data from entering any State system; user interfaces (i.e., screens, reports, etc.) that accurately show 4 digit years; and assurance that the year 2000 shall be correctly treated as a leap year within all calculation and calendar logic.

### **2.314 Third-party Software Warranty**

The Contractor represents and warrants that it will disclose the use or incorporation of any third-party software into the Deliverables. At the time of Delivery, the Contractor shall provide in writing the name and use of any Third-party Software, including information regarding the Contractor's authorization to include and utilize such software. The notice shall include a copy of any ownership agreement or license that authorizes the Contractor to use the Third-party Software.

### **2.315 Physical Media Warranty**

Contractor represents and warrants that each licensed copy of the Software provided by the Contractor is free from physical defects in the media that tangibly embodies the copy. This warranty does not apply to defects discovered more than (30) thirty days after that date of Final Acceptance of the Software by the State. This warranty does not apply to defects arising from acts of Excusable Failure. If the Contractor breaches this warranty, then the State shall be entitled to replacement of the non-compliant copy by Contractor, at Contractor's expense (including shipping and handling).

### **2.320 Software Licensing**

#### **2.321 Cross-License, Deliverables Only, License to Contractor**

The State grants to the Contractor, the royalty-free, world-wide, non-exclusive right and license under any Deliverable now or in the future owned by the State, or with respect to which the State has a right to grant such rights or licenses, to the extent required by the Contractor to market the Deliverables and exercise its full rights in the Deliverables, including, without limitation, the right to make, use and sell products and services based on or incorporating such Deliverables.

#### **2.322 Cross-License, Deliverables and Derivative Work, License to Contractor**

The State grants to the Contractor, the royalty-free, world-wide, non-exclusive right and license under any Deliverable and/or Derivative Work now or in the future owned by the State, or with respect to which the State has a right to grant such rights or licenses, to the extent required by the Contractor to market the Deliverables and/or Derivative Work and exercise its full rights in the Deliverables and/or Derivative Work, including, without limitation, the right to make, use and sell products and services based on or incorporating such Deliverables and/or Derivative Work.



### **2.323 License Back to the State**

Unless otherwise specifically agreed to by the State, before initiating the preparation of any Deliverable that is a Derivative of a preexisting work, the Contractor shall cause the State to have and obtain the irrevocable, nonexclusive, worldwide, royalty-free right and license to (1) use, execute, reproduce, display, perform, distribute internally or externally, sell copies of, and prepare Derivative Works based upon all preexisting works and Derivative Works thereof, and (2) authorize or sublicense others from time to time to do any or all of the foregoing.

### **2.324 License Retained by Contractor**

Contractor grants to the State a non-exclusive, royalty-free, site-wide, irrevocable, transferable license to use the Software and related documentation according to the terms and conditions of this Contract. For the purposes of this license, "site-wide" includes any State of Michigan office regardless of its physical location.

The State may modify the Software and may combine such with other programs or materials to form a derivative work. The State will own and hold all copyright, trademarks, patent and other intellectual property rights in any derivative work, excluding any rights or interest in Software other than those granted in this Contract.

The State may copy each item of Software to multiple hard drives or networks unless otherwise agreed by the parties.

The State will make and maintain no more than one archival copy of each item of Software, and each copy will contain all legends and notices and will be subject to the same conditions and restrictions as the original. The State may also make copies of the Software in the course of routine backups of hard drive(s) for the purpose of recovery of hard drive contents.

In the event that the Contractor shall, for any reason, cease to conduct business, or cease to support the Software, the State shall have the right to convert these licenses into perpetual licenses, with rights of quiet enjoyment, but subject to payment obligations not to exceed the then current rates.

### **2.235 Pre-existing Materials for Custom Software Deliverables**

Neither Contractor nor any of its Subcontractors shall incorporate any preexisting materials (including Standard Software) into Custom Software Deliverables or use any pre-existing materials to produce Custom Software Deliverables if such pre-existing materials will be needed by the State in order to use the Custom Software Deliverables unless (i) such pre-existing materials and their owners are identified to the State in writing and (ii) such pre-existing materials are either readily commercially available products for which Contractor or its Subcontractor, as the case may be, has obtained a license (in form and substance approved by the State) in the name of the State, or are materials that Contractor or its Subcontractor, as the case may be, has the right to license to the State and has licensed to the State on terms and conditions approved by the State prior to using such pre-existing materials to perform the Services.

### **2.330 Source Code Escrow**

#### **2.331 Definition**

"Source Code Escrow Package" shall mean:

- (a) A complete copy in machine-readable form of the source code and executable code of the Licensed Software, including any updates or new releases of the product;
- (b) A complete copy of any existing design documentation and user documentation, including any updates or revisions; and/or
- (c) Complete instructions for compiling and linking every part of the source code into executable code for purposes of enabling verification of the completeness of the source code as provided below. Such instructions shall include precise identification of all compilers, library packages, and linkers used to generate executable code.



### **2.332 Delivery of Source Code into Escrow**

Contractor shall deliver a Source Code Escrow Package to the Escrow Agent, pursuant to the Escrow Contract, which shall be entered into on commercially reasonable terms subject to the provisions of this Contract within (30) thirty days of the execution of this Contract.

### **2.333 Delivery of New Source Code into Escrow**

If at anytime during the term of this Contract, the Contractor provides a maintenance release or upgrade version of the Licensed Software, Contractor shall within ten (10) days deposit with the Escrow Agent, in accordance with the Escrow Contract, a Source Code Escrow Package for the maintenance release or upgrade version, and provide the State with notice of the delivery.

### **2.334 Verification**

The State reserves the right at any time, but not more than once a year, either itself or through a third party contractor, upon thirty (30) days written notice, to seek verification of the Source Code Escrow Package.

### **2.335 Escrow Fees**

The Contractor will pay all fees and expenses charged by the Escrow Agent.

### **2.336 Release Events**

The Source Code Escrow Package may be released from escrow to the State, temporarily or permanently, upon the occurrence of one or more of the following:

- (a) The Contractor becomes insolvent, makes a general assignment for the benefit of creditors, files a voluntary petition of bankruptcy, suffers or permits the appointment of a receiver for its business or assets, becomes subject to any proceeding under bankruptcy or insolvency law, whether domestic or foreign;
- (b) The Contractor has wound up or liquidated its business voluntarily or otherwise and the State has reason to believe that such events will cause the Contractor to fail to meet its warranties and maintenance obligations in the foreseeable future;
- (c) The Contractor voluntarily or otherwise discontinues support of the provided products or fails to support the products in accordance with its maintenance obligations and warranties.

### **2.337 Release Event Procedures**

If the State desires to obtain the Source Code Escrow Package from the Escrow Agent upon the occurrence of an Event in this **Section**, then:

- (a) The State shall comply with all procedures in the Escrow Contract;
- (b) The State shall maintain all materials and information comprising the Source Code Escrow Package in confidence in accordance with this Contract;
- (c) If the release is a temporary one, then the State shall promptly return all released materials to Contractor when the circumstances leading to the release are no longer in effect.

### **2.338 License**

Upon release from the Escrow Agent pursuant to an event described in this **Section**, the Contractor automatically grants the State a non-exclusive, irrevocable license to use, reproduce, modify, maintain, support, update, have made, and create Derivative Works. Further, the State shall have the right to use the Source Code Escrow Package in order to maintain and support the Licensed Software so that it can be used by the State as set forth in this Contract.

### **2.339 Derivative Works**

Any Derivative Works to the source code released from escrow that are made by or on behalf of the State shall be the sole property of the State. The State acknowledges that its ownership rights are limited solely to the Derivative Works and do not include any ownership rights in the underlying source code.

**Attachment A**  
**Attach Organizational Chart**

Project Resources Listing by MAERS Project Phase is listed in a Table below:

<b>Project Phase</b>	<b>Resources</b>	<b>Time Commitment (%)</b>
I. Project Planning and Management	<b>Sony Su (Lead)</b> Lijie Xu	70 % 43 %
II. Requirements Verification and Validation	Tony Jeng (Lead) Sony Su Danwen Sun Lijie Xu	5 % 70 % 48 % 43 %
III. Design of New System	<b>Jason Huang (Lead)</b> Sony Su Danwen Sun Jason Wang Alex Li Roger Yang Lijie Xu Douglas Timms	8 % 70 % 48 % 59 % 53 % 65 % 43 % 5 %
IV. Development of New System	<b>Danwen Sun (Lead)</b> Jason Wang Alex Li Roger Yang Lijie Xu	48 % 59 % 53 % 65 % 43 %
V. Testing of the New System	<b>Sony Su (Lead)</b> Lih Soong Charlie Tsai	70 % 9 % 13 %
VI. Placing the New System in Production	<b>Roger Yang (Lead)</b> Lijie Xu Lih Soong Steven Wu	65 % 43 % 9 % 1 %
VII. Training and Documentation	<b>Sony Su (Lead)</b> Lijie Xu Barbara Fruhling Patricia Moran	70 % 43 % 5 % 2 %
VIII. Maintenance & Support	<b>Sony Su (Lead)</b> enfoTech Support Team	70 % As Needed
IX. Future Enhancements	<b>Sony Su (Lead)</b> enfoTech Support Team	70 % As Needed



## **Key Personnel – Overview of Roles and Responsibilities**

### **Sony Su**

**Roles:** Project Manager, Testing Lead, Training/Documentation Lead, User Support Lead

**Education:** BS and MS in Chemical Engineering.

**Project Responsibility:** Sony will serve as the enfoTech team Project Manager. Sony will also serve as a key assistant to Tony Jeng for Requirement Verification and Validation. Sony will be responsible for developing the project plan document, outlining major milestones, defining work breakdown structure tasks and maintain the project schedule current. He will also be monitoring project deliverables, tracking the project progress and will provide status reports to the SOM's project manager. Sony will be the key point-of-contact for the SOM's project team. He will be responsible for ensuring that project deliverables are completed on time and within budget. Overall, the PM will be responsible for coordinating the project team and project schedules and will contribute heavily to the completion of project tasks.

### **Tony Jeng**

**Roles:** Contract Administrator and Requirement Verification Lead

**Education:** BS and MS in Chemical Engineering.

**Project Responsibility:** Administer the MAERS contract. Tony will work closely with the SOM Project Manager and Mr. Sony Su (enfoTech's Project Manager) to ensure that the project is completed on time, within budget, and will meet the users' expectations. Tony will also serve as a technical advisor to the project to provide technical review for the deliverables and offer recommendations at all stages of the project.

### **Jason Huang**

**Roles:** IT Technical Advisor and System Design Lead

**Education:** BA in Business and MS in Computer Science

**Project Responsibility:** Act as the technical advisor to the project team and offer expert recommendations during all phases of technical solution development. Jason will lead the system design team to architect the technical solutions to ensure that the final products meet users' requirements, comply with MDIT standards, and take advantage of SOA technologies that offer SOM the system extensibility to grow.

### **Douglas Timms**

**Roles:** Technical Advisor on NEI Data Flow and Exchange Network Related Tasks

**Education:** BS in Chemical Engineering, Certified PMP (Project Management Professional)

**Project Responsibility:** Mr. Timms will serve as a technical advisor for the MAERS part #3 system - NEI data flow to CDX. He will also provide technical assistance on issues relating to Exchange Network standards, protocols, and technologies.

### **Danwen Sun**

**Role:** MAERS System Development Lead

**Education:** BS and MS in Electrical Engineering

**Project Responsibility:** Mr. Sun will serve as the overall System Development Lead for the MAERS project. He will have the overall authority over system development resources and work with Sony to direct all system development activities.



### Roger Yang

**Role:** MAERS System Production Lead

**Education:** BS in Business Management, MA in Computer Science, MBA in MIS & Finance

**Project Responsibility:** Mr. Yang will serve as the System Production Lead for the MAERS project. He will assume the overall responsibility to deliver production-ready systems, work with MIDIT to install the systems in the QA and PROD environment, and transfer technologies to MDIT via documentation and training. Prior to placing the system into the PROD environment, Roger will migrate the MAERS data from the existing Central Air database to the new Central Air database (RAPIDS-3 model)

### Charlie Tsai

**Role:** Technical Consultant to Node 2.0

**Education:** BS in Business Management, MS in Computer Information Science

**Project Responsibility:** Charlie is an enfoTech Director responsible for developing Node 2.0 software and a software converter to migrate Node 1.1 data flows to work with the 2.0 specifications. He will provide crucial support to address Node 1.1 to Node 2.0 transition issues during the NEI data flow development.

### Steven Wu

**Role:** System Infrastructure and Security Support

**Education:** BS in Physics, M.B.A., MS in Computer Information Science, PhD in Management of Information Systems

**Project Responsibility:** Steven will provide system infrastructure support to the MAERS project. He will be responsible for setting up the server environment at enfoTech that is consistent with the MDIT environment for project development, testing, and performance simulation. He will also provide assistance to infrastructure security, virus protection, and system disaster recovery related issues.



**Exhibit B**  
**Approved Hardware**

**Hardware, Software and Network Requirements Overview**

This session shows an overview of the hardware, software, and network requirements for the MAERS system.

**Internet Application (for MAERS-Facility, and MAERS-State if used in Internet environment):**

- Hardware requirements
  - Two Web Servers (with Web Load Balancing)
  - Two Application Servers (with Application Load Balancing)
  - Two Database Servers (with Microsoft Cluster Service-MSCS)
- Software requirements
  - Microsoft Windows Server 2003 R2 with SP2, Enterprise Edition
  - Microsoft SQL Server 2005 with SP2, Enterprise Edition
- Network requirements
  - 1.54 mbps T1 connection or higher
  - 100 mbps LAN connection or higher
  - Internet connection with 128-bit SSL certificate

**Intranet Application (for MAERS-State if used in the Intranet environment):**

- Hardware requirements
  - Two Web Servers (with Web Load Balancing)
  - Two Application Servers (with Application Load Balancing)
  - Two Database Servers (with Microsoft Cluster Service-MSCS)
- Software requirements
  - Microsoft Windows Server 2003 R2 with SP2, Enterprise Edition
  - Microsoft SQL Server 2005 with SP2, Enterprise Edition
- Network requirements
  - 100 mbps LAN connection or higher

Please note that the hardware and software requirements are provided separately to support both the Internet and Intranet environment. After the business requirement gathering/verification phase, enfoTech will work with MDIT to provide a revised hardware/software requirement report based on an actual system deployment scenario.

Detailed requirements for each server are provided below. Please note that the server models and processor brand names are used here only for illustration purposes. As long as the servers provide similar performance capability and storage space, other brand name servers will also be suitable for the project.

**(A) Web Server Requirements**

<b>Web Server</b>	<b>Requirements</b>
Model	Dell PowerEdge 840
Processor	Dual Core Intel Xeon Processor 2.66 GHz or higher
Memory	8 GB of RAM or higher
Hard Drive Configuration	RAID 5
Hard Drive	Three 250 GB SATA hard disks
Operating System	Microsoft Windows Server 2003 R2 with SP2, Enterprise Edition .NET Framework 2.0 or higher
Software	Internet Information Server (IIS) 6.0
Security	Server Certificate/SSL (128 bit encryption)



**(B) Application Server Requirements**

<b>Application Server</b>	<b>Requirements</b>
Model	Dell PowerEdge 2900 III
Processor	Dual Core Intel Xeon Processor 3.33 GHz or higher
Memory	16 GB of RAM or higher
Hard Drive Configuration	RAID 5
Hard Drive	Three 250 GB SATA hard drives
Operating System	Microsoft Windows Server 2003 R2 with SP2, Enterprise Edition .NET Framework 2.0 or higher

**(C) Database Server Requirements**

<b>Database Server</b>	<b>Requirements</b>
Model	Dell PowerEdge 2900 III
Processor	Dual Core Intel Xeon Processor 3.33 GHz or higher
Clustering	Dell PowerEdge SE600W SCSI (SAS) Clustering
Memory	16 GB of RAM or higher
Hard Drive Configuration	RAID 5
Hard Drive	Three 500 GB SATA hard drives
Operating System	Microsoft Windows Server 2003 R2 with SP2, Enterprise Edition
Software	Microsoft SQL Server 2005 with SP2, Enterprise Edition



**Exhibit C**  
**Approved Software**

The Contractor is to provide all required development software necessary to carry out the services and deliverables to be provided under this contract.

The following software will be used in MAERS project:

- 1) Windows 2003 enterprise server R2 with sp2.
- 2) Microsoft SQL Server 2005 with Sp2
- 3) .NET Framework 2.0 and up
- 4) SQL Server Reporting Services
- 5) Active PDF



**Appendix A1**  
**Current MDEQ MAERS Application Environment**

The current MAERS is used by state employees and the public, and is comprised of the following components:

APPLICATION NAME	ENVIRONMENT	USED BY	LOCATIONS
MAERS data entry	PowerBuilder 7.0 front-end sqlAnywhere back-end	Industry	Single user data entry system
EI Toolkit	PowerBuilder 7.0 front end, MS SQL Server 2000 backend	MDEQ-AQD staff	SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLPRD Hosted on the MDIT SQL Servers
MAERS Internet Site Inquiry	Developed using Microsoft ASP.net	Public	SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLDMZ TEST:DEQSQLTESTNEW Hosted on the MDIT SQL Servers and MDIT WEB Servers. <a href="http://www.deq.state.mi.us/maers/">http://www.deq.state.mi.us/maers/</a>

**ENVIRONMENT - INTERFACES:**

1. DEQ Site Registry	The DEQ Site Registry is a geographically-based database that presents information about facilities and locations of interest to the Michigan Department of Environmental Quality (MDEQ) and the environmental community. This site contains general site information on active and closed facilities and the environmental interest at the site. Facilities and compliance data from additional MDEQ databases will be added as resources become available. It can be utilized to determine if more than one division/program has an environmental interest in a particular facility. Links to GIS (Michigan's Center for Geographic Information) allows facilities to be geographically searched and mapped. Owner: MDEQ	MDEQ Application Interface with MAERS	SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLPRD Hosted on the MDIT SQL Servers
2. Name of application: EPA NIF		MDEQ Application Interface with Central_Air database	SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLPRD Hosted on the MDIT SQL Servers
3. Name of application: Microsoft Navision enterprise accounting system	Navision is the MDEQ's Central Cash Receipting and Invoicing System which uses the AATOOLKIT interface to securely pull (import) data from MAERS to a secure drive. These files are then manually accessed by the department's Financial Business Services Division staff and further imported into Navision for processing. Owner: MDEQ	Select MDEQ-AQD staff. MDEQ Application Interface with Central_Air database	QA: DEQSQLQANEW PROD: DEQSQLPRD
4. Name of application: Michigan Air Compliance and Enforcement System (MACES)	The Michigan Air Compliance and Enforcement System (MACES) was developed to improve AQD's ability to execute air pollution compliance and enforcement activities through better information sharing within AQD and between AQD and the Environmental Protection Agency (EPA). MACES will provide a centralized process for collecting compliance and	MDEQ Application Interface with Central_Air database.	SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLPRD Hosted on the MDIT SQL Servers

	<p>enforcement and testing information, and provide timely reports which affect AQD staff, the public, industry and the EPA. MACES will be utilized by the AQD district staff, stack testing staff, and enforcement staff to enter and store compliance, enforcement and testing information, manage compliance, enforcement and testing information, and track this data over time.</p> <p>Owner: MDEQ</p>		
<p>5. Name of application: Renewable Operating Permit (ROP_Toolkit)</p>	<p>ROP_Toolkit is a computer based system for completing and reviewing a Renewable Operating (RO) Permit Application. Owner: MDEQ</p>	<p>MDEQ Application Interface with Central_Air database.</p>	<p>SQL Server Name QA: DEQSQLQANEW PROD: DEQSQLPRD Hosted on the MDIT SQL Servers</p>
<p>6. Name of application: Eval Form</p>	<p>Application. Owner: MDEQ</p>		

Appendix A2  
MDIT Application Hosting Services

# Application Hosting Services

Understanding  
Constitution Hall Consolidated  
Internet Application Hosting Environment

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Michigan Department of Information Technology  
Agency Services

Constitution Hall  
Application Hosting Services

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### **Overview**

The purpose of this working document is to assist in the understanding of the overall consolidated application hosting environment. This document will describe the current hardware, operating systems, configuration, processor, memory, and storage capability as well as currently supported technologies and third-party supported software for application integration.

Even though this document contains some detailed aspects of the hosting environment, it should mainly be used for a general understanding of the consolidated hosting environment as it is always maturing. Since this document is a dated snap shot of the current hosting environment, software application developers should continually communicate with the hosting operations teams to ensure any designs, assumptions, questions, or issues are addressed as early as possible in the software application product lifecycle.

### **Software Architecture**

Software applications developed by staff and contractors may have different client-server software architectures. Software applications may be designed using 2-tiers, 3-tiers, or n-tier software architectures depending on many factors and business requirements. Software architectures can be designed so the presentation layer, business logic layer, and data layer are contained within each or all of the tiers.

Software architectures are the responsibility of the contractor or staff developing a software application. However, the overall systems architecture (which includes the hosting environment) is the joint responsibility of both the software development team and hosting operations teams.

In order for the hosting operations teams to best meet the needs of each software application, an Application Hosting Requirements form should be completed for each new or enhanced software application. Details include but are not limited to the type of application, technologies used, and memory requirements, storage requirements, transaction speed, uptime, backups, security isolation, configuration, throughput should be communicated to the hosting team. In addition, all major milestones in the product lifecycle of a software application should be communicated to the operations teams including but not limited to analysis, design, code, maintenance, as well as training plans, testing and implementation plans.

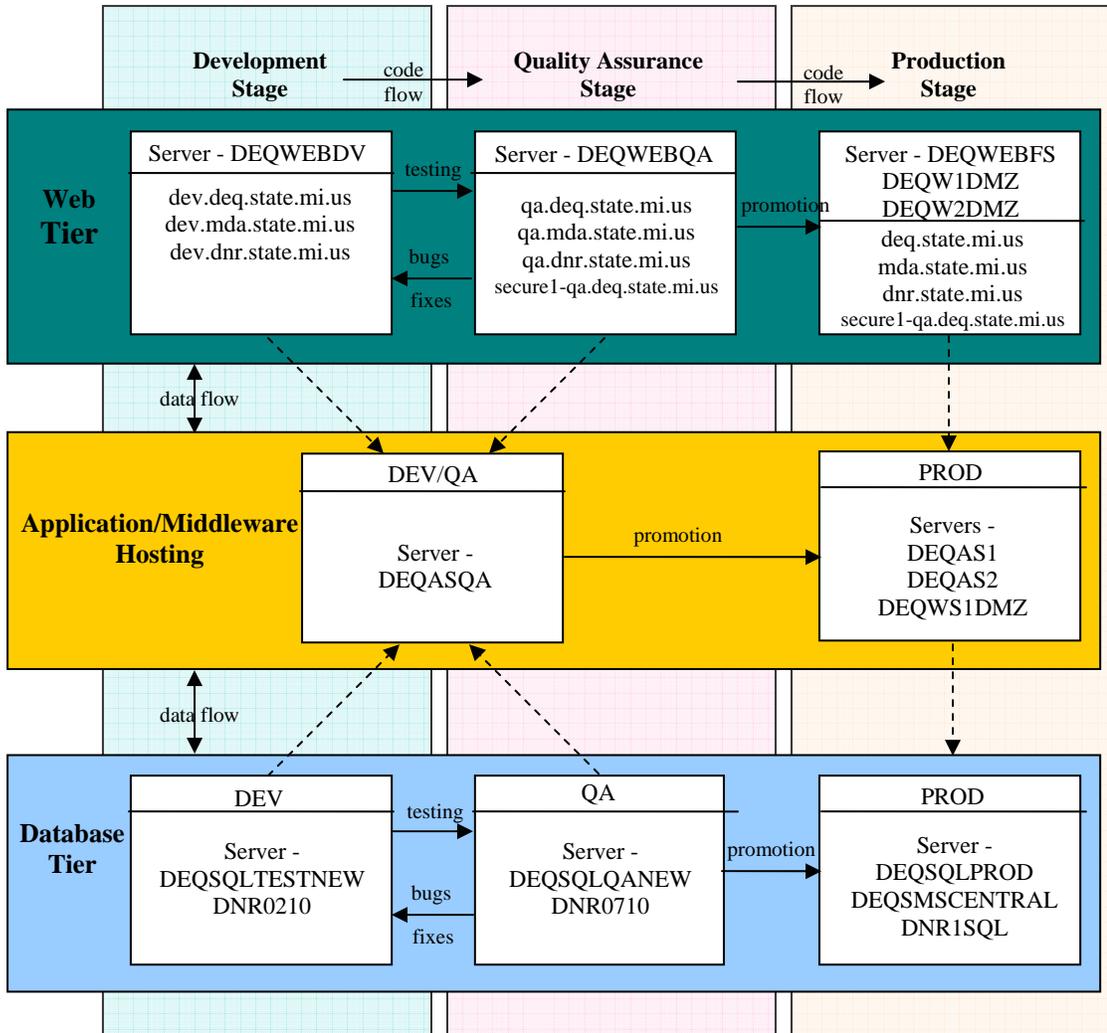
### Application Development

Application development in the consolidated hosting environment consists of a three stage lifecycle approach : Development (DEV), Quality Assurance (QA), and Production (PROD). The DEV stage consists of the actual development and testing of the application by the developer. New or enhanced web applications should be developed on the developer’s environment and/or the shared development web server (WEBDV). Similarly, a local desktop database or SQLTEST database server should be utilized while developing software applications that require database functions.

Once applications and associated databases are stable and ready for customer acceptance testing, they should be repackaged and submitted for installation on the QA environment. The QA stage should be for customer acceptance testing. Any changes or bugs found in the QA stage should return the application to the DEV stage until the fixes are ready to be tested in QA. After final acceptance testing, requested software applications are then submitted for installation to a PROD environment.



### Application Development Logical Code & Data Flow



## Application Hosting Services



### Hosting Services

The consolidated hosting environment utilizes a Microsoft Windows 2000-based Hosting Solution running on multiple Intel-based processors. This hosting solution includes centralized management, monitoring/reporting, patch management as well as web, middleware, and database hosting services.

Centralized Management	Provides one point of contact for web, middleware and database services. Centrally managed users, accounts, servers, applications, services and security. Developers are not given access to QA or production servers.
Monitoring and Reporting	Tools are available to proactively monitor both internal and external operations.
Patch Management	Centralizes and simplifies the process of performing software and security updates. All critical patches related to the operating system are installed without notification; however, major service packs are planned and communicated with all software application owners.
Data Hosting Services (DEV, QA, PROD Environments)	Enables you to Develop, QA, and power your Production web sites and client/server applications with a reliable database environment.
Middleware Hosting Services (QA and PROD Environments)	Enables you to Test as well as power your Production applications and client/server systems with a centralized middleware environment.
Web Hosting Services (DEV, QA, and PROD Environments)	Enables a variety of Development, QA, and Production hosted Web services (e.g. basic dedicated mail, ASP applications, FTP Applications, .NET applications).
Clustered Hosting Environment (PROD Environment)	Gives Production applications greater uptime thanks to load balancing and NLB clustering.

The database, middleware, and web hosting teams work closely with the infrastructure team (commonly known as the server Team) for File/Print Services, Email Services, Backup Solutions, and Patch Management Solutions.

### Related Services

Backup Services – are coordinated with the local Server Team.

File Services – are coordinated with the local Server Team.

Print Services – are coordinated with the local Server Team.

Network Services – are coordinated with the local Server Team.

GroupWise Services – are coordinated with the local Server Team.

SMTP Email Services – are coordinated with the DIT Telecom Team.

DNS Naming Services – are coordinated with the DIT Telecom Team.

### Web Hosting Services

- All web servers are dual or quad processor Dell PowerEdge servers.
- Windows 2000 or Advanced Servers running IIS 5.0 web server.
- Windows 2003 Servers running IIS 6.0 web server.
- The Internet production web servers are clustered with a network load balancing switch.
- All web servers are patched within 3 days of new Microsoft critical security patches.

#### Currently Supported Web Technologies and Third-Party Software

- Active Server Pages 2.0 (ASP)
- ActivePDF Server / WebGrabber 3.5.2 SP5
- Component Services (COM+)
- ESRI ArcIMS Web Components (*ActiveX and Java Connectors*)
- File Transfer Protocol (FTP) Services
- Java Servlet Pages (JSP) (*utilizing JRun4 Proxy connector to JRun4 Application Server*)
- JRE 1.4.0
- HTTP 1.0, 1.1 (*host headers utilized*)
- MDAC 2.7 SP2
- MSXML 2.6SP3, 3.0SP4 and 4.0SP2
- .NET Framework 1.0, 1.1, 2.0
- Secure Socket Layer (SSL)
- Server Side Includes (SHTML)
- Simple Mail Transfer Protocol (SMTP) Services
- Symantec Anti-virus corporate edition
- Web Services Enhancements (WSE) 1.0 SP1 for .NET

Please contact the [Web Services Team](#) if additional technologies or services are needed, as well as any specific memory or storage space requirements.

#### Current Web Server Breakdown

FTPDMZ	Dedicated Production Internet FTP server
WS1DMZ	Dedicated Production Internet Web Services server for stand alone applications and non-clustered web services
WWWDMZ	Consolidated load balanced internet Web Servers (W1DMZ, W2DMZ)
WEBFS	Dedicated Production Staging Web Server for Automated Batch Processing, Web Application Management, and Pre-Production Application Staging.
WEBQA	Dedicated Quality Assurance Testing Web Server for intranet and Internet Applications
WEBDV	Dedicated Development Web Server for intranet and Internet Applications



## Application / Middleware Hosting Services

- All middleware servers are dual or single processor Dell PowerEdge servers.
- All middleware servers are Windows 2000 Advanced Server.
- All middleware servers are patched within 3 days of new Microsoft critical security patches.

### Currently Supported Middleware Technologies and Third-party Software

- Component Services (COM+)
- ESRI ArcIMS 4.0
- ESRI License Manager
- JRun4 Application Server
- JRE 1.4.0
- MDAC 2.7 SP2
- Rockworks License Manager

Please contact the [Web Services Team](#) if additional technologies or services are needed, as well as any specific memory or storage space requirements.

### Current Middleware Server Breakdown

AS1	Shared Dual-Processor Production Middleware Application Server
AS2	Shared Single-Processor Production Middleware Application Server
ASQA	Dedicated Development and Quality Assurance Testing Server



**Database Hosting Services**

- All database servers are single, dual or quad processor Dell PowerEdge servers.
- All\* database servers are Windows 2000 Server or Advanced Server running Cluster Services.
- Both SQLPRD and SQLDMZ production database servers are designed for high availability and utilize Windows Cluster Service.

Currently Supported Database Technologies and Third-party Software

- SQL Server 2000 SP4
- SQL Server 7.0

Current Database Server Breakdown

SQLPRD	Consolidated Production Cluster Services intranet SQL server (SQL1PRD, SQL2PRD)
SQLDMZ	Consolidated Production Cluster Services Internet SQL server (SQL1DMZ, SQL2DMZ)
SQLQANEW	Dedicated Quality Assurance SQL database server
SQLTESTNEW	Dedicated Development/Testing SQL database server
SMSCENTRAL	Dedicated Production SQL server for SMS
DNR50710	Dedicated Quality Assurance SQL database server
DNR50210	Dedicated Development/Testing SQL database server
DNR50810	Dedicated Production SQL server
SQL7PROD	* Deprecated SQL 7.0 server for legacy application
SQLQA	* Deprecated SQL 6.5 server for legacy application

Intranet Hosting

Please see the "Intranet Hosting Environment" document for an overview of the intranet hosting environment.



**APPENDIX B**  
**Functional Requirements**

Contractor’s proposal states that it will meet the following listed Service Level Requirements for the system. The contractor has provided sufficient responses to indicate how it will meet the identified requirements or how it complies with modification. The contractor has provided additional comments that confirm compliance with identified requirements.

**NOTE: The second column codes are defined as: M = Mandatory, O=Optional**

Requirements	M or O	EnfoTech’s Proposal Addresses Requirement - Yes or No	EnfoTech’s Comments
<b>1. System Architecture</b>			
a) The new MAERS system shall include the following:	<b>M</b>	Yes	
b) Internet-based architecture with an intelligent workstation client.	<b>M</b>	Yes	Our proposed solution of MAERS-Facility, MAERS-State, and NEI Node flow are all web-based solutions. We propose an Internet-based solution for MAERS-Facility in lieu of a Workstation Client application. This approach will let SOM avoid the difficulties in application distribution to all reporting facilities.
c) A 3 tier approach to access a central database through software on a server.	<b>M</b>	Yes	We use a 3 tier (n-tier) model for all our Products and customers’ projects
d) Unlimited record size.	<b>M</b>	Yes	The only limitation will be Hardware limitation.
e) Modular in design	<b>M</b>	Yes	To achieve a good 3 tier design objective, keeping a modular design is a key consideration. We follow not only OOP coding practices, but also implement AOP and SOP (Service Oriented Programming) in our solutions to promote application modularity.
f) Hosted on the SOM servers	<b>M</b>	Yes	We have a great deal of experience in implementing solutions within the SOM technical environment with other projects such as NMS, ePermit, E2, and eNode.
g) Compatibility with the SOM environment.	<b>M</b>	Yes	We had similar compatibility requirements implemented in our applications within SOM’s environment, such as NMS, ePermit, E2, and eNode.
h) Record the user ID in the database each time a record is modified.	<b>M</b>	Yes	This feature has already been implemented in our EAF (Enfotech Application Framework) and hence is a feature in all our Products.
i) Record a timestamp in the database each time a record is modified.	<b>M</b>	Yes	This feature has already been implemented in our EAF (Enfotech Application Framework) and hence is a feature in all our Products.
j) The system must be capable of handling multiple people accessing a single record concurrently.	<b>M</b>	Yes	This feature has already been implemented in our EAF (Enfotech Application Framework) and hence is a feature in all our Products.
k) The facility information certified and submitted by the facility operator must be stored and archived in a secure manner.	<b>M</b>	Yes	The data submitted by facilities will be stored in MAERS-Facility, which is based off of SOM’s existing E2 application. This application has a proven track record of providing secure management of information to satisfy SOM and federal CROMERR security standards.
l) The system must provide a capability	<b>M</b>	Yes	



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
for users to send messages regarding questions and problems to a central mailbox.			
<b>2. Software Licensing</b>			
a) The new MAERS system shall only include source code that can be maintained by the SOM staff.	M	Yes	enfoTech will comply with this requirement. The pre-existing enfoTech library source code will be used and included for this project. To maintain the integrity of our pre-existing library section 2.264 Ownership of Materials should be followed.
b) The new system shall not include code or software that is proprietary.	M	Yes	Other than those approved 3 <sup>rd</sup> party products (i.e. Crystal Report), enfoTech will not use any proprietary software for new MAERS system development
<b>3. Hardware</b>			
a) Any Vendor recommended hardware platform/topology changes or upgrades must provide for optimal functioning in the following areas:	M	Yes	
b) Communication line speed for distributed data entry functions and major online processes in the clients' offices located in various areas of the State.	M	Yes	We had similar Communication requirements implemented in our applications for SOM's environment, such as NMS, ePermit, E2, and eNode.
c) Processing the data collected and any increases in data throughput that can be expected through the implementation of the proposed system, i.e., stress testing and load planning.	M	Yes	We had similar stress and load testing requirements implemented in our applications for SOM's environment, such as NMS, ePermit, E2, and eNode.
d) Application installation on the SOM server's, and support	M	Yes	We have implemented many applications in SOM's server environment, such as NMS, ePermit, E2, and eNode.
e) Administration of the developed software by SOM staff.	M	Yes	For many past application implementations for SOM, we have helped SOM's staff to administrate the developed application software.
f) SOM and EPA network configurations.	M	Yes	We had similar network communication/ configuration requirements implemented in many applications for SOM's environment, such as eNode, NMS, ePermit, and E2.
<b>4. RDBMS / Applications / Database Management</b>			
a) The system shall be developed to use DEQ's standard relational database management system (SQL server 2005).	M	Yes	
b) The system will use RAPIDS-3 data structure; refer to Rapids Data Model: ( <a href="http://www.glc.org/air/rapids3/Default.html">http://www.glc.org/air/rapids3/Default.html</a> ).	M	Yes	



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
c) The database must have the expandability to add each new year of data for the storage of facility and emissions information.	M	Yes	The system is designed to allow reporting of air emissions from facilities for multiple years. This model is similar to the eDMR reporting system implemented by enfoTech for SOM, where facilities can submit reports (in this case monthly). Report management screens are provided that allow users to manage/search their submissions spanning multiple reporting periods.
d) The RAPIDS-3 database ( <a href="http://www.glc.org/air/rapids3/Default.html">http://www.glc.org/air/rapids3/Default.html</a> ) must be converted from PostgreSQL to Microsoft SQL Server version 2005. (All scripts and procedures must be modified, as necessary, to run on Microsoft SQL Server.)	M	Yes	In the past, we have done many of the data migration/ integration projects for SOM's application implementations.  PostgreSQL to Microsoft SQL Server migration will be designed at an early stage as part of the overall new RAPIDS-3 MS SQL Server design/ development efforts.
e) All existing views, stored procedures, and functions in the current version of MAERS database must be updated using the new RAPIDS-3 database structure.	M	Yes	We had done similar database related tasks for many application implementations in SOM's environment.  This task will be part of the overall new RAPIDS-3 MS SQL Server design/ development efforts.
f) The new MAERS system must provide access to the correct data layer, based on the login information.	M	Yes	
g) The facility information certified and submitted by the facility operator must be stored and archived in accordance with SOM security policy.	M	Yes	The data submitted by facilities will be stored in MAERS-Facility, which is based off of SOM's existing E2 application. This application has a proven track record of providing secure management of information to satisfy SOM security policies. enfoTech will work with SOM to ensure that this policy compliance continues for this implementation.
<b>5. System and Performance Requirements</b>			
a) See Appendix C	M	Yes	We had similar custom report and Query requirements implemented in many applications for SOM's environment, such as eNode, NMS, ePermit, E2 etc.
<b>6. Security / Access Control</b>			
a) The system must have a method for allowing a person to request access to the MAERS site (registration).	M	Yes	Our proposed MAERS-Facility system is based off of the E2 system, in which this capability is already provided. (See screenshot below <sup>1</sup> )
b) The system must have a method for validating and authenticating a request for access to the MAERS site (login).	M	Yes	We have had similar authentication requirements implemented in many applications for SOM such as for E2 shown in the screenshot below.



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
c) The new MAERS system will enable the SOM to administer data access security, including application security (granting of access, resetting of passwords, definition of password syntax rules, monitoring of access violation reports, etc.). The State will administer all user security profiles. The MDIT will oversee and coordinate security issues relative to the Vendor.	M	Yes	Our proposed MAERS-Facility system is based off of the E2 system, in which this security administration capability is already provided. (See screenshot below <sup>2</sup> )  enfoTech will work with both SOM's MAERS group and MDIT to obtain all security requirements and comply with them during MAERS's system design.
d) The new MAERS system must have component-level security, to be able to define security roles, assign users to those roles and grant component-level security privileges to application specific roles, i.e., a program security administrative function.	M	Yes	This has already been implemented in E2. See screenshot below.
e) The new MAERS system must provide application level secure access control based upon unique user login, for types of user roles as well as by function performed upon the record (e.g., Display, Add, Edit, Delete) by the user.	M	Yes	This application level security requirement has been implemented in all our major products such as ePermit and E2 (see screenshot below).  enfoTech will comply with any current or future Michigan state 'application level security' requirements.
f) Each Facility must have read and write access to their own password secured account where they can enter their emissions information. The system shall prohibit a facility from seeing the data of another facility.	M	Yes	We have implemented this requirement in all our products.  This fundamental application security feature will be addressed during the MAERS design phase.
g) The system must be able to accommodate over 2000 such accounts.	M	Yes	This 'accessibility' requirement will be well addressed in the MAERS system design and demonstrated by various Load & Stress test results.
h) Facility operators must be able to access their accounts as many times as necessary in order to enter their information, save the data, and come back to the transaction.	M	Yes	This account 'multiple accesses' and transaction requirement will be well addressed in MAERS design phase and, in general it is a standard feature in all our products.
i) The system must have a method for allowing the user to request their password to be reset	M	Yes	
<b>7. Administrative Functionality</b>			
a) The system must provide for the ability of a system administrator to modify all reference tables.	M	Yes	Through Database related documentations and Step-by-step how-to guide, MAERS administrators will be well trained to manage the reference tables.
b) The system must provide the ability to create a new facility within MAERS.	M	Yes	This new facility creation requirement will be well addressed in the MAERS system design and will be developed as one of the 'facility' default functions.



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
<b>8. Software Package Specifications</b>	<b>M</b>		
a) The new MAERS system will operate on State hardware platform.	<b>M</b>	Yes	We have demonstrated the compliance of this requirement through many of our product implementations for SOM, such as NMS, ePermit, E2, and eNode.
b) The new MAERS system shall be compatible with the MDIT standard desktop OS at the time the new system will go into production. The current desktop OS it is MS Windows XP sp2 and more recent versions.	<b>M</b>	Yes	We have demonstrated the compliance of this requirement through many of our product implementations for DEQ, such as NMS, ePermit, E2, Node, etc.  Certain design considerations to address hardware and software 'extensibility' will also be addressed in the MAERS design and implementation.
c) The new MAERS system shall provide a Graphical User Interface (GUI) that is consistent with the existing design.	<b>M</b>	Yes	We will work with SOM to modify or develop GUIs that are consistent with SOM's existing design.
d) The new MAERS system shall comply with the eMI standards.	<b>M</b>	Yes	During our ePermit and E2 developments for DEQ, we had the opportunity to closely look into eMI standards and will have no problem of comply with it under MAERS project.
e) The new MAERS system shall provide the following capabilities:	<b>M</b>	Yes	
i) data entry		Yes	
ii) calculation		Yes	
iii) reporting		Yes	
iv) communication.		Yes	
f) The new MAERS system must check each user's access privileges at login, and automatically disable or enable client functions and fields (in real time) based upon the user's profile.	<b>M</b>	Yes	This authorization requirement has been implemented in our major products such as E2, NMS, etc.
g) (Audits) The new MAERS system shall continue to enable the user to modify data entry transactions that have already been posted to the database.	<b>M</b>	Yes	We had implemented many data 'revision' processes for MDEQ's existing systems such as NMS, E2 and ePermit.
h) The new MAERS system shall maintain an audit trail of transactions, including changes to transactions.	<b>M</b>	Yes	
i) The system shall have the capability of authenticating transactions through the use of electronic signatures.	<b>M</b>	Yes	Through our experience in developing e-Reporting solutions to many states (including existing electronic signature solutions for SOM), we have developed several comprehensive options for user authentication to meet eGovernment/ CROMERR security concerns. We will work with SOM to determine the technical approach best suited for this application that is aligned with SOM's security requirements.
j) The system must be able to accommodate electronic attachments to the submittal.	<b>M</b>	Yes	MAERS-Facility is based on E2, which already provides this functionality as a configurable component. Because E2 handles attachments at the enterprise level, each data flow (such as EI) can



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
			configure the level of attachment handling, and other attributes, such as: maximum attachment size, allowable attachment types, and can also support both offline (i.e. snail mail) and uploaded attachments. <sup>3</sup>
k) The system must provide the ability to withdraw/resubmit a MAERS report	<b>M</b>	Yes	
l) The system must provide a method for navigating between available forms, based on the hierarchy of forms.	<b>M</b>	Yes	
m) The system must provide a method to "bookmark" the last form accessed, allowing the user the capability of quickly resuming their task.	<b>M</b>	Yes	
<p>n) DEQ AQD is anticipating a new emissions estimator being developed for the GLC Rapids 3 system. This emissions estimator will be incorporated into the system.</p> <ul style="list-style-type: none"> <li>i) The system must provide access to an emissions estimator for the purpose of calculating emissions based on the material and process information entered.</li> <li>ii) The emissions estimator will use EPA emission factors.</li> <li>iii) The emission estimator will generate emissions by facility, countywide, and/or statewide basis.</li> <li>iv) The emissions estimator will be available online to facilities and AQD staff when entering source data.</li> </ul>	<b>M</b>	Yes	This is described in Section 1.0.3
o) In the event that the Rapids 3 estimator is not completed, the new MAERS system will include an upgrade to the existing emissions estimator.	<b>M</b>	Yes	<p>By design, we will use SOA (Service Oriented Architecture) based 'integration' technology to address the integration requirements between MAERS and future Rapids 3 estimator.</p> <p>Through this 'loose coupling', open protocol based approach, this upgrade can be easily created and much of the work can still be reused when Rapids 3 estimator is ready.</p>
p) The system must provide a new Fee Calculator, used to estimate fees and create data used by NaVision. Detail regarding the Fee Calculator can be found in Fee User Guide at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--_00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--_00.html</a> .	<b>M</b>	Yes	This is described in Section 1.0.3



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
q) The system must provide a data entry screen for the entry of HCL total emissions for a specific facility.	M	Yes	This feature will be provided as part of the MAERS-State system. Since ESD maintains the HCL data from the TRI report, we will work with SOM to design a good business process to allow the AQD/ESD to capture and update this data.
r) The system must provide a method for selecting the facility for which to enter/audit forms. The functionality requested is similar to the Central Explorer, which is described in EIToolKit Software Users Guide, Central Explorer at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html</a> .	M	Yes	
s) The system shall provide an indicator for providing feedback to the user that the system is busy processing a requested task.	M	Yes	
<b>9. Data Entry Forms</b> (Additional information regarding the forms can be found in 2008 MAERS Workbook at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html</a> ).			
a) The system shall provide data entry screens forms that have the look and feel of the screens of the current design. The forms to be included in the new MAERS system are:		Yes	
- Source (S-101)	M	Yes	
- Contact (S-102)	M	Yes	
- Stack (SV-101)	M	Yes	
- Emission Unit (EU-101)	M	Yes	
- Reporting Group (RG-101)	M	Yes	
- Activity (A-101)	M	Yes	
- Emissions (E-101)	M	Yes	
- Operator (O-101)	M	Yes	
- Supplemental Portable (SP-101)	M	Yes	
	M		
b) The new MAERS system must limit edit capabilities to one person at a time for a facility. Any other user accessing the facility's forms must be able to view the data only.	M	Yes	This feature will be addressed in the overall MAERS application Security and Transaction controls design.
c) Forms that are open for view only must include a visual indication that the information is for read only.	M	Yes	See above.
d) Forms that are open for view only must not allow for data to be entered into the fields.	M	Yes	See above.
e) The new MAERS system shall enforce	M	Yes	A wizard based, step-by-step control mechanism



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
the hierarchy of forms for data entry. Please refer to Forms Hierarchy at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--.00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--.00.html</a> .			will be used to enforce the hierarchy of forms for data entry.
f) The new MAERS system shall include an application administration tool for actions such as reference table maintenance, security definition, etc.	M	Yes	
g) The new MAERS system will provide an Administrative function to a staff person(s) for control use of the system by MDEQ staff with regard to roles, tasks, and authority.	M	Yes	Our proposed MAERS-Facility system is based off of the E2 system, in which this security administration capability is already provided. (Security Administration screenshot previously provided.)
h) The new MAERS system will include fields, based on specific roles, in data entry screen that will allow AQD staff to enter additional data.	M	Yes	'Role specific fields' will be addressed right from MAERS database design phase and implemented in all MAERS' 3-tier development.
i) The new MAERS system will include comment fields available for each screen (e.g., E-101 Emissions Data) and add in a "zoom" capability on all comment boxes for ease of use. Incorporate automatic spell check on comment boxes if software supports.	M	Yes	'Comment fields' will be addressed during MAERS database and application design phase and implemented in all MAERS' record level maintenance screen.
j) The new MAERS system shall enable conditional edits during data entry.	M	Yes	These conditional edits will be identified at MAERS' design stage, and implemented for data entry maintenance screens.
k) The new MAERS system shall include the capability for date validation.	M	Yes	All fields (not just dates) will have the opportunity to be checked by the enterprise Validation Engine, which allows any reportable field to be validated based on an XML-based validation rule-set.
l) The system must check for the existence of pending changes and provide a warning to the user before navigating to another form.	M	Yes	This 'pending change' checking mechanism will be part of MAERS overall transaction control
<b>10. Edit and Validation</b>			
a) The new MAERS system will include comprehensive screen edits to prevent incomplete or incorrect data from entering the system.	M	Yes	All fields (not just dates) will have the opportunity to be checked by the enterprise Validation Engine, which allows any reportable field to be validated based on an XML-based validation rule-set.
b) The new MAERS system will include an overall completeness check to validate that all necessary forms are included. (Refer to Completeness Check at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--.00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--.00.html</a> )	M	Yes	All fields (not just dates) will have the opportunity to be checked by the enterprise Validation Engine, which allows any reportable field to be validated based on an XML-based validation rule-set.
<b>11. Reports and Queries</b> (Additional information regarding the forms			



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
can be found in EIToolKit Software Users Guide and MAERS-EI Toolkit Report Exhibits at <a href="http://www.michigan.gov/deg/0,1607,7-135-3310_4103_4193-191494--,00.html">http://www.michigan.gov/deg/0,1607,7-135-3310_4103_4193-191494--,00.html</a> )			
a) In the new MAERS system reports will be able to run without database timeouts or locking the data entry.	M	Yes	Compliance with well-defined database timeout definition.
b) The new system will provide all reports as currently defined in the existing MAERS.	M	Yes	All existing reports and potential new reports needed for the new MAERS system will all be delivered.
c) The new system must support the ability to print or export all forms and reports to multiple formats (PDF, Excel).	M	Yes	We have implemented similar print requirements in many major product implementations for MDEQ such as E2, ePermit, NMS, etc.
d) The new MAERS system shall include a comprehensive query and report capability including the extract accounting report for Navision.	M	Yes	
e) The new MAERS system shall include a comprehensive ad hoc query and reporting functionality to be further defined during the JAD sessions.	M	Yes	Depending on the final Report server selected at the MAERS design phase, the ad hoc query mechanism will be included in the final MAERS system design.
f) The canned report package will include reports that will populate other documents (i.e., format letters and invoices).	M	Yes	Through sub-report or other document merge mechanisms, all required documents will be presented to the end user as a complete report.
<b>12. Downloads and Translation/Transfer Requirements</b>	M	Yes	
a) The new MAERS system shall have the capability to electronically transfer data to fulfill federal EPA reporting requirements.	M	Yes	enfoTech was one of the 'lead' consultants to help federal EPA to define the electronic data transfer standards for states and CDX.  See Section 1.0.3(C) for additional explanation for our approach to this requirement.
b) The system shall be capable of exporting data to meet State/EPA data exchange protocols (XML Schema requirements) referenced as described at <a href="http://iaspub.epa.gov/emg/portal.navigate_det?P_DATA_IDENTIFIER=91269">http://iaspub.epa.gov/emg/portal.navigate_det?P_DATA_IDENTIFIER=91269</a> .	M	Yes	See Section 1.0.3(C) for additional explanation.
c) Data transfers must occur thru the DEQ Data Exchange Node.	M	Yes	enfoTech developed the existing DEQ Data Exchange Node and is fully capable of developing data flow plug-ins for this Node. We also offer a free upgrade to Node 2.0. See Section 1.0.3(C) for additional explanation.
d) Migrate data from current Central_Air database to the new MAERS database, using RAPIDS-3 data model.	M	Yes	
e) The system must have the ability to move data from one layer to another:	M	Yes	



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
i submittal layer – Industry access (outside the firewall)	M	Yes	
ii audit layer – AQD field staff access	M	Yes	
iii production layer – MDEQ Emissions Reporting and Assessment (ERA) Unit staff access	M	Yes	
f) Once the facility operator's data has passed the screening audit, the operator must be able to certify and submit their emissions report. Once a submittal is made, the operator information will be "locked in". The operator will still be able to view their data and produce reports but will not be able to make changes. The DEQ system administrator must be able to un-lock the account, if necessary.	M	Yes	
g) The new MAERS system will provide the capability of exporting data to and from the host/server to the desktop for processing on other software packages. XML is the preferred method of transfer.	M	Yes	A SOA (loose coupling), standard protocol based integration (SOI – Service Oriented Integration) mechanism will be designed as part of MAERS data integration capability.
h) Data connections to the following programs will be remapped: Renewable Operating Permit (ROP) – Toolkit, Michigan Air Compliance and Enforcement System (MACES), Permit Eval Form – New Source Review Permits, Navision – MDEQ financial and accounting system used for fee invoicing.	M	Yes	XML open based schema and style-sheet (and other needed integration mechanisms) will be created to guarantee the backward-compatibility requirements for all current existing system that will need to work with the new MAERS system.
<b>13. Training</b>			
a) The selected vendor must provide training as part of the cost of the system, to include:	M	Yes	
i) User training	M	Yes	
ii) Technical training for SOM individuals who will be working with the Vendor during the development of the new MAERS system.	M	Yes	
iii) Training for MDIT personnel who will be responsible for ongoing maintenance and administration of the MAERS system, including security.	M	Yes	
iv) Training of AQD staff on the use of the new MAERS System.	M	Yes	
b) All Vendor Software training manuals, training plans and other documentation provided will continue to be the	M	Yes	



Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
property of the State.			
<b>14. Documentation</b>			
a) Vendor shall supply the following documentation in an electronic format, modifiable using MS Office tools, online and in hard copy:		Yes	
1) New MAERS User and Technical Manuals - On-line and Hard Copy	<b>M</b>	Yes	
2) New MAERS Data Element Dictionary (Refer to Schumaker Report at <a href="http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html">http://www.michigan.gov/deq/0,1607,7-135-3310_4103_4193-191494--,00.html</a> )	<b>M</b>	Yes	
3) Information flow, function and procedure calls, and internal system operations diagrams and descriptions of sufficient detail that they will allow the SOM IT staff to debug the MAERS applications without vendor's assistance.	<b>M</b>	Yes	In-line document, step-by-step system administrator and developer guides and many system administrator and developer trainings will be provided to make sure SOM IT staff can debug, maintain and extend the MAERS system.
b) The Vendor must submit the following documentation for the new MAERS system:		Yes	
i) System-wide documentation and specifications	<b>M</b>	Yes	
ii) Installation procedure	<b>M</b>	Yes	
iii) Module configuration documents sufficient for configuration and maintenance purposes	<b>M</b>	Yes	
iv) Testing scripts for SOM testing for approval to the Project Manager.	<b>M</b>	Yes	
v) Specification documentation	<b>M</b>	Yes	
vi) Production migration documents	<b>M</b>	Yes	
<b>15. Data Management</b>			
a) The State is responsible for long-term retention of public records. The new MAERS System must include the capability of exporting data to other formats and have a data exchange path via XML.	<b>M</b>	Yes	XML schema and other open protocols will be used to guarantee the MAERS 'extensibility' capability. XML export capabilities will be provided.
b) The new MAERS system shall be capable of maintaining a copy of each submittal, as entered by the facility.	<b>M</b>	Yes	The E2 system stores an official Copy of Record (COR) for ALL submissions made by facilities. This includes a copy of each revision in cases when facilities submit revisions. This is part of MAERS-Facility's overall CROMERR compliance to ensure consistent storage of a Copy of Record.

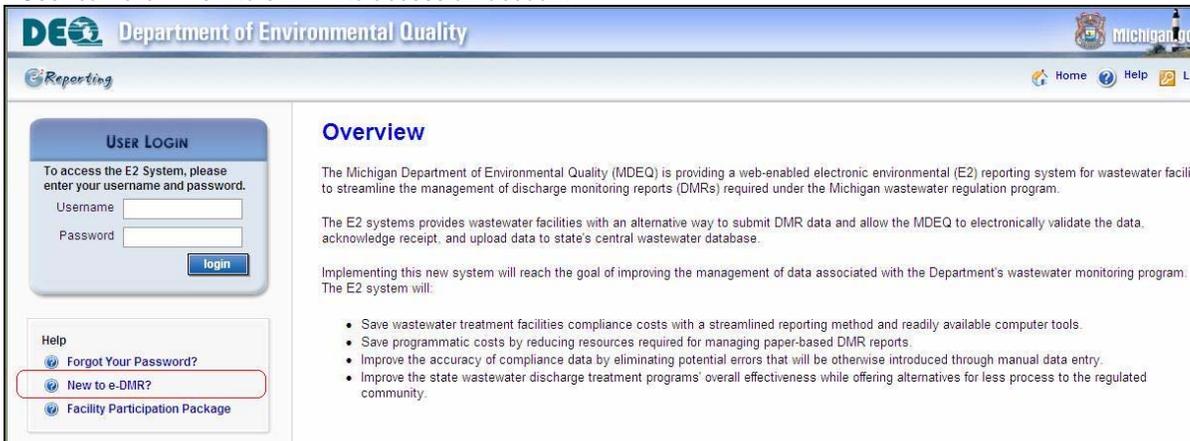


Requirements	M or O	EnfoTech's Proposal Addresses Requirement - Yes or No	EnfoTech's Comments
<b>16. Modification to Meet New Requirements</b>			
a) The Vendor selected for the new MAERS System must commit to providing staff for future enhancements. See Appendix D for further details.	<b>M</b>	Yes	
<b>17. Data Transfer</b>			
a) The new MAERS system shall have the capability to transfer data to other systems to be further defined in Phase II Verification and Validation (see section 1.104).	<b>M</b>	Yes	XML schema and other open protocols will be used to give MAERS an 'extensible' data integration mechanism.

***Bonus Deliverables:***

The following “bonus deliverables” will be provided by EnfoTech as part of this contract. Bonus deliverables are provided and included suggestions/software features, proposed by EnfoTech, based on their previous project experiences, as in-kind services to enhance the overall project values to the SOM. The SOM has accepted these extra bonus deliverables, however if deemed necessary these features may be removed from scope if it conflicts with the above mentioned mandatory requirements.

<sup>1</sup> User can click “New to e-DMR to access an account”



**DEQ Department of Environmental Quality**

**Reporting** Home Help

**User LOGIN**

To access the E2 System, please enter your username and password.

Username

Password

**login**

**Help**

- Forgot Your Password?
- New to e-DMR?**
- Facility Participation Package

**Overview**

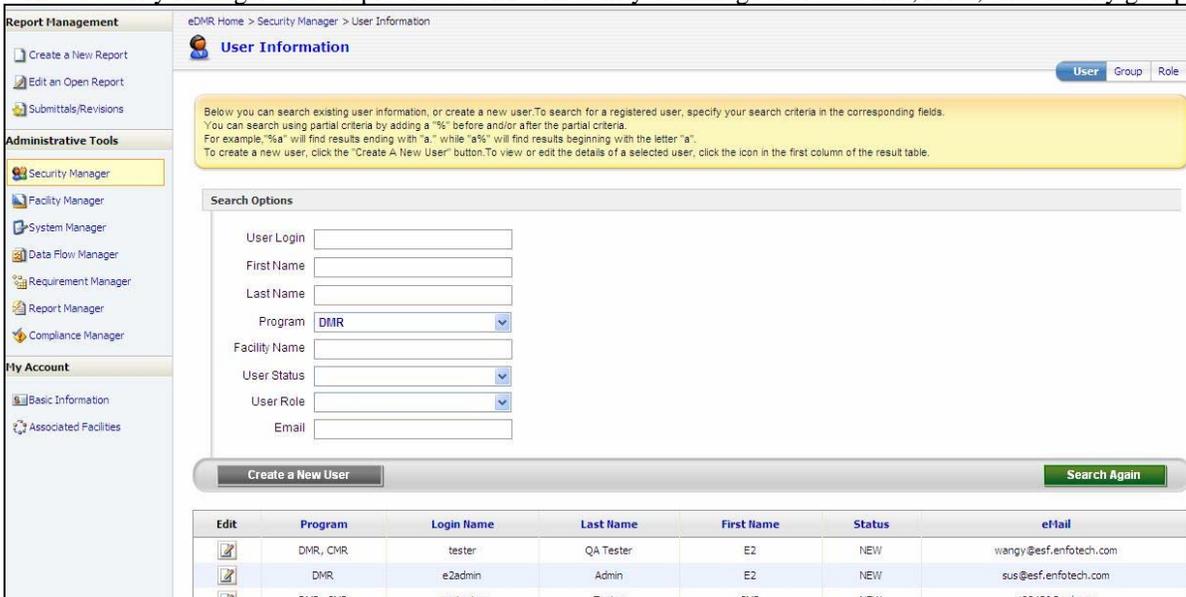
The Michigan Department of Environmental Quality (MDEQ) is providing a web-enabled electronic environmental (E2) reporting system for wastewater facilities to streamline the management of discharge monitoring reports (DMRs) required under the Michigan wastewater regulation program.

The E2 systems provides wastewater facilities with an alternative way to submit DMR data and allow the MDEQ to electronically validate the data, acknowledge receipt, and upload data to state's central wastewater database.

Implementing this new system will reach the goal of improving the management of data associated with the Department's wastewater monitoring program. The E2 system will:

- Save wastewater treatment facilities compliance costs with a streamlined reporting method and readily available computer tools.
- Save programmatic costs by reducing resources required for managing paper-based DMR reports.
- Improve the accuracy of compliance data by eliminating potential errors that will be otherwise introduced through manual data entry.
- Improve the state wastewater discharge treatment programs' overall effectiveness while offering alternatives for less process to the regulated community.

<sup>2</sup> The “Security Manager” screen provides SOM with ability to manage user accounts, roles, and security groups.



Report Management

- Create a New Report
- Edit an Open Report
- Submittals/Revisions

Administrative Tools

- Security Manager**
- Facility Manager
- System Manager
- Data Flow Manager
- Requirement Manager
- Report Manager
- Compliance Manager

My Account

- Basic Information
- Associated Facilities

eDMR Home > Security Manager > User Information

**User Information** User Group Role

Below you can search existing user information, or create a new user. To search for a registered user, specify your search criteria in the corresponding fields. You can search using partial criteria by adding a "%" before and/or after the partial criteria. For example, "%a" will find results ending with "a," while "a%" will find results beginning with the letter "a". To create a new user, click the "Create A New User" button. To view or edit the details of a selected user, click the icon in the first column of the result table.

**Search Options**

User Login

First Name

Last Name

Program **DMR**

Facility Name

User Status

User Role

Email

**Create a New User** **Search Again**

Edit	Program	Login Name	Last Name	First Name	Status	eMail
	DMR, CMR	tester	QA Tester	E2	NEW	wangy@esf.enfotech.com
	DMR	e2admin	Admin	E2	NEW	sus@esf.enfotech.com
	DMR, CMR	...	...	...	NEW	...

<sup>3</sup> Electronic attachments configuration page:

eDMR Home > Data Flow Manager > Attachment Configuration

**Attachment Configuration**

Email Compliance Revision **Attachment** Form

Below you may configure attachment mailing address and specify the maximum size of the files.

**Attachment Configuration**

Select a Program: **DMR**

Maximum File Size per File (kilobytes): **1000000**

Attachments Mailed To: [Please click the following link for the regional office mailing address.](#)

**Acceptable Attachment Type(s)**

Extension	Mime Type
<input type="checkbox"/> mde	application/msaccess
<input type="checkbox"/> ldb	application/msaccess
<input type="checkbox"/> gif	image/gif
<input type="checkbox"/> jpg	image/jpeg
<input type="checkbox"/> jpeg	image/jpeg

1 2 3 4

Add File Type Save



#	Page # referred in EnfoTech's proposal	"Bonus Deliverables" provided by EnfoTech
1	Page 17	The new NEI data flow will be configured to support both the current NIF (i.e. NEI XML Version 3) format and future CERS schema format.
2	Page 17	Configure the Michigan Node to allow Exchange Network partners to retrieve the NEI data (in a secure manner) for data discovery and data retrieval without any human intervention. This would be accomplished by implementing a "Solicit" service on the Michigan Node in addition to the "Submit" service already required.
3	Page 19	Flow NEI data from DEQ to CDX via Node - This data flow will be configured to work with both Michigan Node 1.1 and future Node 2.0 architecture. In addition, the data flow will be configured to comply with EPA's new CERS XML schema when it is finalized.
4	Pages 29, 46 & 47	Comply with the Exchange Network Protocol: The E2 System is built on a Service Oriented Architecture (SOA). It has adopted XML schema as the data transfer and exchange protocol. All E2 modules utilize an environmental XML schema approved/published by the EPA Exchange Network. The E2 architecture will allow the SOM to be ready for the NEI data flow with very little effort.
5	Page 32	Reusable MAERS Core Components: enfoTech proposes to create a set of open access Service Oriented Architecture (SOA) MAERS Core Components based on a Standardized EI Schema. With this design, the MAERS Core Components can be leveraged by both the MAERS-Facility and the MAERS-State Systems, as well as by related MDEQ Applications in the future.
6	Pages 32 & 292	Facility Participation Package: enfoTech will provide the SOM with enfoTech's Facility Outreach and Marketing materials package to help ensure that the launch of the new MAERS-Facility application is a success. The package includes efoTech's recommended Roll-Out Strategy and Pilot Program process, as well as flyer and mailing materials for the State to leverage. enfoTech has used this approach in previous projects with great success; it is a critical component of introducing electronic reporting applications that is often overlooked.
7	Page 33	Electronic Invoice and Fee Reports: A Fee would not be required at the time of Report Submission in MAERS-Facility; instead, the Fee would be calculated via the MAERS Core 'Fee Calculator' after Submission by AQD Administrators in MAERS-State. The AQD Administrator could send the Invoice electronically to the Source Owner. When the Source Owner receives the Invoice, they will be given a link to Pay Online, or a link for more information on how to dispute their Annual Fee. All information will be tracked in MAERS-State and available via Fee Transaction and Balance Reports.
8	Page 293	MAERS-Facility End-User Submission Video Tutorial: A step by step video guide illustrating the Process for submitting EI Data to the SOM via MAERS-Facility

**Appendix C**  
**Service Levels Agreements**

Contractor’s proposal states that it will meet the following listed Service Level Requirements for the system. The contractor has provided sufficient responses to indicate how it will meet the identified requirements or how it complies with modification. The contractor has provided additional comments that confirm compliance with identified requirements.

**NOTE: The second column codes are defined as: M = Mandatory.**

Requirements	M	EnfoTech Meets Requirement (Yes or No)	EnfoTech’s Comments
<b>SERVICE LEVEL REQUIREMENTS</b>			
1. The systems update and changes must meet all MDIT requirements for system security. See Article 1.103.	M	Yes	enfoTech has experience in adhering to SOM security requirements based on our past experience implementing the E2, ePermit (MiTAPS), NMS, and eNode system. We will continue to adhere to SOM security standards.
2. Both online inquiry and online update of single transactions shall be achieved in a reasonable time depending on the complexity of the transaction or query. A target of fifteen (15) seconds or less ninety percent (90%) of the time. i. <b>Measurement</b> – Time will be measured from the time the request arrives in the application server until the final response leaves the application server. ii. <b>Period of Review</b> – Monthly.	M	Yes	We had addressed similar ‘response time’ requirement for all our current products (such as ePermit, E2, NMS, etc.).  We had also gone through this requirement during the development and implementations of ePermit and E2 and eNode systems for Michigan DEQ.
3. During the production period, provide six (6) months maintenance and support (through one MAERS Reporting Cycle) to resolve any implementation issues and problems MAERS may encounter to resolve defects.	M	Yes	
4. The vendor agrees to provide maintenance to commence at the end of the production run and acceptance of the system.	M	Yes	
5. All maintenance will be performed by qualified personnel familiar with the newly developed system.	M	Yes	Maintenance roles will be well defined in the enfoTech MAERS development team. The maintenance schedule will also be clearly documented in our project proposal. enfoTech adheres to a CMMI-based ESF system to ensure Organizational Training (OT) is in place. As part of our OT approach, all staff are matrixed against skills and project roles to ensure that only qualified personnel are assigned to project staff.
6. The diagnostic tools used by the vendor are to be provided to the SOM with training.	M	Yes	We will work with SOM to either use SOM’s existing CA Unicenter, or use enfoTech’s standard diagnostic tool (Visual Studio Team System Web Test) based on SOM preference.

Requirements	M	EnfoTech Meets Requirement (Yes or No)	EnfoTech's Comments
7. Any application maintenance shall include all future source code and related functionality updates and system enhancements applicable to system modules.	M	Yes	
8. The vendor agrees to provide technical support available during SOM business hours with escalation as necessary.	M	Yes	
9. Calls for service will be returned within 2-4 hours.	M	Yes	
10. Error Correction. Upon notice by State of a problem with the Software (which problem can be verified), staff will be provided to respond within an hour to correct or provide a working solution for the problem.	M	Yes	



**Appendix D**  
**Cost Tables**

Firm fixed price for each of the following:

1. Work and Deliverables Phases I through VI
2. Training and Documentation
3. Maintenance and Support (Annual cost)

The Work and Deliverables Phases I through VI” will be allocated by the percentages shown below to arrive at the milestone payment for that deliverable.

4. In addition to these three fixed prices described above, the contractor has provided fully loaded hourly rates for staff that are committed for future enhancements. See notes below for further detail on these rates.

<b>1. Work and Deliverables Services to be Provided</b>	<b>Labor and other costs associated with the services provided in Phase I. See section 1.104 for further information on these work items. See note 1.</b>	<b>Milestone Payment for Deliverable</b>
<b>Phase I – Project Management</b> (See details in Section 1.104)		
1. Conduct one project kickoff meeting.	\$7,446	\$7,446
2. Project plan	\$6,001	\$6,001
2a. Project Team Website	\$1,964	\$1,964
2b. Bi-Weekly Project Status Conference Calls	\$15,249	\$15,249
2c. Weekly Project Status Reports	\$9,945	\$9,945
3. Project Schedule	\$3,094	\$3,094
<b>Phase I Total</b>	<b>\$43,699</b>	<b>\$43,699</b>
<b>Phase II – Requirements Verification and Validation</b> (See details in Section 1.104)		
1. Functional Requirements Specification Document	\$4,080	\$4,080
1a. Conduct 2-Days Onsite Requirements Gathering Meetings	\$16,422	\$16,422
1b. NEI Trading Partner Agreement	\$2,244	\$2,244
2. Requirements Traceability Matrix	\$9,486	\$9,486
3. Technical Requirements Document	\$8,517	\$8,517
4. Updated Project Plan	\$1,938	\$1,938
5. Updated Project Schedule	\$969	\$969
<b>Phase II Total</b>	<b>\$43,656</b>	<b>\$43,656</b>



1. Work and Deliverables Services to be Provided	Labor and other costs associated with the services provided in Phase I. See section 1.104 for further information on these work items. See note 1.	Milestone Payment for Deliverable
<b>Phase III – Design of the New MAERS System</b> (See details in Section 1.104)		
1a. Conduct 2-Days Onsite System Design Meetings	\$17,544	\$17,544
1b. MAERS-State System Design Document	\$62,764	\$62,764
1c. MAERS-Facility System Design Document	\$57,154	\$57,154
1d. NEI Flow Configuration Document	\$11,016	\$11,016
1e. Database Design Document	\$31,212	\$31,212
2. Design Work Breakdown Structure (WBS)	\$5,712	\$5,712
3. Updated Project Plan	\$1,938	\$1,938
4. Updated Project Schedule	\$969	\$969
5. Design QA/QC Certification	\$6,664	\$6,664
6. Training Plan and Schedule	\$6,307	\$6,307
7. Hardware configuration recommendations and estimates	\$4,760	\$4,760
<b>Phase III Total</b>	<b>\$206,040</b>	<b>\$206,040</b>
<b>Phase IV – Development of the New MAERS System</b> (See details in Section 1.104)		
1a. Development Work Breakdown Structure (WBS)	\$7,315	\$7,315
1b. MAERS-State Development Document	\$9,604	\$9,604
1c. MAERS-Facility Development Document	\$9,835	\$9,835
1d. NEI Data Flow Plug-in Development Document	\$9,604	\$9,604
2a. MAERS-State Alpha Version Source Code	\$91,980	\$91,980
2b. MAERS-Facility Alpha Version Source Code	\$76,860	\$76,860
2c. NEI Data Flow Plug-in Alpha Version Source Code	\$23,604	\$23,604
2d. Conduct 1-Day Review of MAERS-State Alpha Version	\$6,720	\$6,720
2e. Conduct 1-Day Review of MAERS-Facility Alpha Version	\$6,720	\$6,720
2f. Conduct 1-Day Review of NEI Data Flow Alpha Version	\$3,360	\$3,360
2g. MAERS-State Beta Version Source Code	\$50,760	\$50,760
2h. MAERS-Facility Beta Version Source Code	\$40,680	\$40,680



1. Work and Deliverables Services to be Provided	Labor and other costs associated with the services provided in Phase I. See section 1.104 for further information on these work items. See note 1.	Milestone Payment for Deliverable
2i. NEI Data Flow Plug-in Beta Version Source Code	\$6,732	\$6,732
2j. Conduct 1-Day Review of MAERS-State Beta Version	\$5,760	\$5,760
2k. Conduct 1-Day Review of MAERS-Facility Beta Version	\$5,760	\$5,760
2l. Conduct 1-Day Review of NEI Data Flow Beta Version	\$2,880	\$2,880
2m. MAERS-State QA Version Source Code	\$11,328	\$11,328
2n. MAERS-Facility QA Version Source Code	\$14,184	\$14,184
2o. NEI Data Flow Plug-in QA Version Source Code	\$2,928	\$2,928
3. Conversion Program (Data Migration Package)	\$7,200	\$7,200
3a. Populated MAERS Database	\$2,400	\$2,400
4a. MAERS-State Test Plan	\$2,100	\$2,100
4b. MAERS-Facility Test Plan	\$2,100	\$2,100
4c. NEI Data Flow Test Plan	\$1,050	\$1,050
5a. MAERS-State Test Scripts	\$5,180	\$5,180
5b. MAERS-Facility Test Scripts	\$5,180	\$5,180
5c. NEI Data Flow Test Scripts	\$1,600	\$1,600
6. Development QA/QC Certification	\$4,960	\$4,960
7. Updated Project Plan	\$1,140	\$1,140
8. Updated Project Schedule	\$570	\$570
<b>Phase IV Total</b>	<b>\$420,094</b>	<b>\$420,094</b>
<b>Phase V – Testing of the New MAERS System</b> (See details in Section 1.104)		
1a. MAERS-State Test Results Document	\$2,720	\$2,720
1b. MAERS-Facility Test Results Document	\$2,720	\$2,720
1c. NEI Data Flow Plug-in Test Results Document	\$1,632	\$1,632
<b>Phase V Total</b>	<b>\$7,072</b>	<b>\$7,072</b>



1. Work and Deliverables Services to be Provided	Labor and other costs associated with the services provided in Phase I. See section 1.104 for further information on these work items. See note 1.	Milestone Payment for Deliverable
<b>Phase VI – Placing the New MAERS System in Production</b> (See details in Section 1.104)		
1a. MAERS-State Performance Log (6 month production)	\$15,120	\$15,120
1b. MAERS-Facility Performance Log (6 month production)	\$15,120	\$15,120
1c. NEI Data Flow Performance Log (6 month production)	\$11,820	\$11,820
<b>Phase VI Total</b>	<b>\$42,060</b>	<b>\$42,060</b>
<b>Total for Phases I to VI</b>	<b>\$ 762,621</b>	<b>\$ 762,621</b>

<b>2. Training and Documentation</b> (See details in Section 1.104 – II.4)	<b>Cost</b>	<b>Milestone Payment</b>
1. Training plan for MDIT & MDEQ project coordinators and area experts, and system administrators.	\$660	\$660
2a. Conduct 2-Days User Training Sessions with Materials	\$3,420	\$3,420
2b. Conduct 1-Day Admin Training Sessions with Materials	\$3,120	\$3,120
2c. Conduct 1-Day Technical Training Sessions with Materials	\$2,520	\$2,520
2d. Conduct ½-Day End-User Training Workshop with Materials	\$660	\$660
3. Final Version of Complete Well documented, un-compiled MAERS source code and scripts.	\$4,600	\$4,600
4. Updated MAERS Technical documents including published database scripts	\$3,440	\$3,440
5. MAERS application programming interfaces (API) or source code interfaces listing properties, methods, input and output parameters, detailed Entity Relationship Diagrams (ERD), Use Cases and any documentation describing the process and data flows.	\$2,460	\$2,460
6. MAERS System Glossary	\$1,570	\$1,570
7. MAERS-State Admin Guide, User Guide, Install Guide	\$2,790	\$2,790
8. MAERS-Facility Admin Guide, User Guide, Install Guide	\$2,790	\$2,790
9. NEI Data Flow Admin Guide and Install Guide	\$1,995	\$1,995
10. EI Submission Video Tutorial via MAERS-Facility	\$4,000	\$4,000
11. Facility Participation Package	\$660	\$660
<b>Total for Section 2</b>	<b>\$34,685</b>	<b>\$34,685</b>

<b>3. Maintenance and Support</b> Annual cost of the maintenance and support of the MAERS system. Maintenance begins after the six month production run and the final acceptance of the system. (See details in Section 1.104 – II.4.)	<b>Year one maintenance</b>	<b>\$ 29,708</b>
	<b>Year two maintenance</b>	<b>\$ 11,883</b>
	<b>Year three maintenance</b>	<b>\$ 11,883</b>
<b>Total for Section 3</b>		<b>\$ 53,474</b>

**4. Services – future enhancements**  
**PURPOSE:**  
 The contractor commits resources and to enter the rates for those resources in the space below. These rates will be used for the duration of the project in the event that the SOM determines that the contractor’s services are needed.

**PROCEDURE:**  
 At the time that a future enhancement is determined to be needed, the SOM will submit a statement of work to the contractor. The Contractor will respond with a proposal identifying staff to be assigned, an estimate of hours for the proposed work, the schedule for the proposed work and the cost of the proposed work based on the labor rates identified in this section. If this proposal is accepted by the DIT Project Manager, the SOM will issue a purchase order for the work.

Name of Vendor **enfoTech & Consulting Inc.**

Date Submitted (Revised Pricing) **July 21, 2008**

Staffing Category	Hourly Rate	Total Estimated Hours	Amount
Project Manager	\$130	200	\$26,000
Business Analyst/ Technical Lead	\$110	350	\$38,500
Senior Developer	\$95	700	\$66,500
Programmer / QA	\$75	700	\$52,500
Technical Writer	\$90	50	\$4,500
<b>Reserved Bank of Hours</b>		<b>2000</b>	
<b>Total Amount for Enhancement</b>			<b>\$188,000</b>

NOTE: This above mentioned pricing is valid for the duration of this contract

**Notes:**

- Hourly rates quoted are firm, fixed rates for the duration of the contract. Travel and other expenses will not be reimbursed. "Estimated Hours" are non-binding and will be used at the State's discretion to determine best value to the State. The State will utilize the fully loaded hourly rates detailed above for each staff that will be utilized as fixed rates for responses to separate statements of work.
- The State intends to establish funding for up to 2000 hours over the life of the contract. Actual funding for enhancements will occur on a yearly basis, and there is no guarantee as to the level of funding, if any, available to the project.