

MARYLAND DEPARTMENT OF THE ENVIRONMENT
OFFICE OF INFORMATION MANAGEMENT AND TECHNOLOGY

CONSULTING AND TECHNICAL SERVICES II (CATS II)

TASK ORDER REQUEST FOR PROPOSALS (TORFP)

CENTRALIZED NODE 2.0 NETWORK EXCHANGE SYSTEM

CATS II TORFP # U00P2400009

ISSUE DATE: 06/06/2011

TABLE OF CONTENTS

SECTIO	N 1 - ADMINISTRATIVE INFORMATION	5
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	RESPONSIBILITY FOR TORFP AND TO AGREEMENT. TO AGREEMENT. TO PROPOSAL SUBMISSIONS. ORAL PRESENTATIONS/INTERVIEWS. MINORITY BUSINESS ENTERPRISE (MBE). CONFLICT OF INTEREST. NON-DISCLOSURE AGREEMENT. LIMITATION OF LIABILITY CEILING. ACRONYMS. CONTRACT MANAGEMENT OVERSIGHT ACTIVITIES.	5 5 5 6 6 6
SECTIO	N 2 - SCOPE OF WORK	
2.1 2.1.1 2.1.2 2.1.3 2.2 2.2.1 2.2.2 2.2.3 2.2.4 2.2.5 2.3.1 2.3.2 2.3.3 2.3.4 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11	PURPOSE AND BACKGROUND PURPOSE REQUESTING AGENCY BACKGROUND PROJECT BACKGROUND SYSTEM COMPONENTS & MDE ENVIRONMENT CENTRALIZED NODE 2.0 EXCHANGE NETWORK COMPONENTS NETWORK TOPOLOGY MDE ENVIRONMENT CURRENT MDE DATA FLOWS PROJECT APPROACH STATEMENT OF WORK TASK 1 - PROJECT INITIATION TASK 2 - CENTRALIZED NODE 2.0 NETWORK EXCHANGE SYSTEM IMPLEMENTATION PLAN TASK 3 - CENTRALIZED NODE 2.0 NETWORK EXCHANGE IMPLEMENTATION TASK 4 - OPTIONAL SERVICES. DELIVERABLES REQUIRED PROJECT POLICIES, GUIDELINES AND METHODOLOGIES. MDE DEPARTMENTAL RESPONSIBILITIES TO CONTRACTOR EXPERTISE REQUIRED RETAINAGE INVOICING REPORTING. CHANGE REQUEST REQUIREMENTS	91011131417192021252634343434
2.12	CHANGE ORDERS	44
SECTI 3.1 3.2	ON 3 - TASK ORDER PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS REQUIRED RESPONSEFORMAT	45
SECTI	ON 4 - PROCEDURE FOR AWARDING A TASK ORDER AGREEMENT	49
4.1	EVALUATION CRITERIA	49
4.2	TECHNICAL CRITERIA	49
4.3	SELECTION PROCEDURES	49
4.4	COMMENCEMENT OF WORK UNDER A TO AGREEMENT	50

ATTACHMENT 1 - SUMMARY PRICE PROPOSAL FOR CATS II TORFP	51
ATTACHMENT 1A - PRICE PROPOSAL (FIXED PRICE) FOR CATS II TORFP	52
ATTACHMENT 1B - PRICE PROPOSAL (TIME & MATERIALS) FOR CATS II TORFP	55
ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS	57
ATTACHMENT 3 – TASK ORDER AGREEMENT	66
ATTACHMENT 4 – CONFLICT OF INTEREST AFFIDAVIT AND DISCLOSURE	69
ATTACHMENT 5 – LABOR CLASSIFICATION PERSONNEL RESUME SUMMARY	70
ATTACHMENT 6 – DIRECTIONS	72
ATTACHMENT 7 – NOTICE TO PROCEED	73
ATTACHMENT 8 – AGENCY RECEIPT OF DELIVERABLE FORM	74
ATTACHMENT 9 - AGENCY ACCEPTANCE OF DELIVERABLE FORM	75
ATTACHMENT 10 – NON-DISCLOSURE AGREEMENT (OFFEROR)	76
ATTACHMENT 11 – NON-DISCLOSURE AGREEMENT (TO CONTRACTOR)	77
ATTACHMENT 12 – TO CONTRACTOR SELF-REPORTING CHECKLIST	79
ATTACHMENT 13 - LIVING WAGE AFFIDAVIT OF AGREEMENT	
ATTACHMENT 14 - SYSTEM FUNCTIONAL REQUIREMENTS	
ATTACHMENT 15 - REQUIREMENTS TRACEABILITY MATRIX	
EXHIBIT A – ACCESS TO CONFIDENTIAL INFORMATION	94

KEY INFORMATION SUMMARY SHEET

This Consulting and Technical Services II (CATS II) Task Order Request for Proposals (TORFP) is issued to obtain the services necessary to satisfy the requirements defined in Section 2 - Scope of Work. All CATS II Master Contractors approved to perform work in the functional area under which this TORFP is released are invited to submit a Task Order (TO) Proposal to this TORFP. Master Contractors choosing not to submit a proposal must submit a Master Contractor Feedback form. The form is accessible via your CATS II Master Contractor login screen and clicking on TORFP Feedback Response Form from the menu. In addition to the requirements of this TORFP, the Master Contractors are subject to all terms and conditions contained in the CATS II RFP issued by the Maryland Department of Information Technology and subsequent Master Contract Project Number 060B9800035, including any amendments.

TORFP Title:	Centralized Node 2.0 Network Exchange System	
Functional Area:	FA5 – Software Engineering	
TORFP Issue Date:	June 6, 2011	
Closing Date and Time:	July 11, 2011 at 2:00 PM EST	
TORFP Issuing Agency:	Maryland Department of the Environment (MDE) Office of Information Management and Technology (OIMT)	
Send Questions and Proposals to:	Dinesh Gandhi – Procurement Associate Email: dgandhi@mde.state.md.us	
TO Procurement Officer:	William Kamberger – Acting Director, Procurement Office Phone Number: 410-537-3076 Office FAX Number: 410-537-4443 Email; bkamberger@mde.state.md.us	
TO Manager:	Wayne Petrush - Director, Project Management Office Phone Number: (410) 537-3099 Office FAX Number: (410) 537-3093 Email: wpetrush@mde.state.md.us	
TO Project Number:	Purchase Order #U00P2400009	
ТО Туре:	Fixed Price and Time & Materials	
Period of Performance:	1 Year Base 1 Year Renewal Option	
MBE Goal:	25 percent	
Small Business Reserve (SBR):	No	
Primary Place of Performance:	Maryland Department of the Environment 1800 Washington Blvd. Baltimore, MD 21230	
TO Pre-proposal Conference:	June 17, 2011, 2-4pm in Terra Conference Room Maryland Department of the Environment 1800 Washington Blvd. Baltimore, MD 21230 (See ATTACHMENT 6 – DIRECTIONS)	

SECTION 1 - ADMINISTRATIVE INFORMATION

1.1 RESPONSIBILITY FOR TORFP AND TO AGREEMENT

The TO Procurement Officer has the primary responsibility for the management of the TORFP process, for the resolution of TO Agreement (TOA) scope issues, and for authorizing any changes to the TOA.

The TO Manager has the primary responsibility for the management of the work performed under the TOA; administration functions, including issuing written directions; ensuring compliance with the terms and conditions of the CATS II Master Contract; and, in conjunction with the selected Master Contractor, achieving on budget/on time/on target (e.g., within scope) completion of the Scope of Work.

1.2 TO AGREEMENT

Based upon an evaluation of TO Proposal responses, a Master Contractor will be selected to conduct the work defined in Section 2 - Scope of Work. A specific TOA, Attachment 3, will then be entered into between the State and the selected Master Contractor, which will bind the selected Master Contractor (TO Contractor) to the contents of its TO Proposal, including the price proposal.

1.3 TO PROPOSAL SUBMISSIONS

The TO Procurement Officer will not accept submissions after the date and exact time stated in the Key Information Summary Sheet above. The date and time of submission is determined by the date and time of arrival in the TO Procurement Officer's e-mail box. The TO Proposal is to be submitted via e-mail as two attachments in MS Word format. The "subject" line in the e-mail submission shall state the TORFP #U00P2400009. The first file will be the TO Proposal technical response to this TORFP and titled, "CATS II TORFP # U00P2400009 Technical". The second file will be the financial response to this CATS II TORFP and titled, "CATS II TORFP # U00P2400009 Financial". The following proposal documents must be submitted with required signatures as .PDF files with signatures clearly visible:

- Attachment 1 Price Proposal
- Attachment 2 MBE Forms D-1 and D-2
- Attachment 4 Conflict of Interest and Disclosure Affidavit
- Attachment 13 Living Wage Affidavit of Agreement

1.4 ORAL PRESENTATIONS/INTERVIEWS

All Master Contractors and proposed staff will be required to make an oral presentation to State representatives. Significant representations made by a Master Contractor during the oral presentation shall be submitted in writing. All such representations will become part of the Master Contractor's proposal and are binding, if the Contract is awarded. The Procurement Officer will notify Master Contractor of the time and place of oral presentations. (This can be conducted via Live Webinar)

1.5 MINORITY BUSINESS ENTERPRISE (MBE)

A Master Contractor that responds to this TORFP shall complete, sign, and submit all required MBE documentation (Attachment 2 - Forms D-1 and D-2) at the time it submits its TO Proposal. Failure of the Master Contractor to complete, sign, and submit all required MBE documentation at the time it submits its TO Proposal will result in the State's rejection of the Master Contractor's TO Proposal.

1.6 CONFLICT OF INTEREST

The TO Contractor awarded the TOA shall provide IT technical and/or consulting services for State agencies or component programs with those agencies, and must do so impartially and without any conflicts of interest. Each Master Contractor shall complete and include a Conflict of Interest Affidavit in the form included as

Attachment 4 this TORFP with its TO Proposal. If the TO Procurement Officer makes a determination that facts or circumstances exist that give rise to or could in the future give rise to a conflict of interest within the meaning of COMAR 21.05.08.08A, the TO Procurement Officer may reject a Master Contractor's TO Proposal under COMAR 21.06.02.03B.

Master Contractors should be aware that the State Ethics Law, State Government Article, §15-508, might limit the selected Master Contractor's ability to participate in future related procurements, depending upon specific circumstances.

1.7 NON-DISCLOSURE AGREEMENT

Certain system documentation may be available for potential Offerors to review at a reading room at MDE, 1800 Washington Blvd., Baltimore, MD. Offerors who review such documentation will be required to sign a Non-Disclosure Agreement (Offeror) in the form of Attachment 10. Please contact the TO Procurement Officer of this TORFP to schedule an appointment.

In addition, certain documentation may be required by the TO Contractor awarded the TOA in order to fulfill the requirements of the TOA. The TO Contractor, employees and agents who review such documents will be required to sign, including but not limited to, a Non-Disclosure Agreement (TO Contractor) in the form of Attachment 11

1.8 LIMITATION OF LIABILITY CEILING

Pursuant to Section 27 (C) of the CATS II Master Contract, the limitation of liability per claim under this TORFP shall not exceed the total TOA amount.

1.9 ACRONYMS

For purposes of this TORFP, the following acronyms or terms have the meanings indicated below. The acronyms are listed alphabetically, and are not in the order that they appear in this document.

AFS	AIRS Facility Subsystem
AQS	Air Quality Subsystem
ARMA	Air and Radiation Management Administration
ASA	Administrative Services Administration
Chesapeake Bay - BMP	Chesapeake Bay - Best Management Practices
CAFO	Concentrated Animal Feeding Operations
CATS	Consulting and Technical Services
CDX	Central Data Exchange
CROMERR	Cross Media Electronic Reporting Regulation
DoIT	Department of Information and Technology
DNR	Department of Natural Resources
ECOS	Environmental Council of States
eDMR	Electronic Discharge Monitoring Report
EEMS	Enterprise Environmental Management System
EIS	Emission Inventory System
EPA	Environmental Protection Agency
FRS	Facility Registry System
GPLv2	GNU Public License version 2

ACRONYMS Continued

HAP	Hazardous Air Pollutants
HERE	Homeland Energy Response Exchange
HP	Hewlett Packard
HTML	HyperText Markup Language
ICIS/DMR	Integrated Compliance Information System/Discharge Monitoring Report
MDE	Maryland Department of the Environment
NEI	National Emissions Inventory
NPDES	National Pollutant Discharge Elimination System
NTE	Not To Exceed
NTP	Notice To Proceed
OIMT	Office of Information Management and Technology
PCS	Permit Compliance System
PDF	Portable Document Format
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PPT	Microsoft Office PowerPoint Document
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QC	Quality Control
RCRA-Handler	Resource Conservation Recovery Act - Handler
RCRA-CME	Resource Conservation Recovery Act-Compliance Monitoring and Enforcement
RCRAInfo	Resource Conservation Recovery Act Information
RIA	Rich Internet Application
ROM	Rough Order Of Magnitude
RSS	Really Simple Syndication
SAN	Storage Area Network
SDLC	Systems Development Life Cycle
SDWIS	Safe Drinking Water Information System
SFTP	Secure File Transfer Protocol
SI	Subject Interest
SLA	Service Level Agreement
SOAP	Simple Object Access Protocol
SQL	Structured Query Language
SSA	Science Services Administration
SSL	Secure Socket Layer
TEMPO	Tools for Environmental Management and Protection Organizations

ACRONYMS Continued

ТО	Task Order
TOP	Task Order Proposal
TORFP	Task Order Request for Proposals
TPA	Trading Partner Agreements
TRI	Toxics Release Inventory
TRM	Technical Reference Model
UAT	User Acceptance Testing
URL	Uniform Resource Locator
WAS	Waste Management Administration
WBS	Work Breakdown Structure
WMA	Water Management Administration
WQX	Water Quality Exchange
WWW	World Wide Web
WYSIWYG	What You See Is What You Get
XHTML	Extensible Hypertext Markup Language
XML	Extensible Markup Language
XSL	Extensible Stylesheet Language

1.10 CONTRACT MANAGEMENT OVERSIGHT ACTIVITIES

The Department of Information Technology (DoIT) is responsible for contract management oversight on the CATS II master contract. As part of that oversight, DoIT has implemented a process for self-reporting contract management activities of CATS II task orders. This process shall typically apply to active TOs for operations and maintenance services valued at \$1 million or greater, but all CATS II TOs are subject to review.

Attachment 12 is a sample of the TO Contractor Self-Reporting Checklist. DoIT will send initial checklists out to applicable TO Contractors approximately three months after the award date for a TO. The TO Contractor shall complete and return the checklist as instructed on the checklist. Subsequently, at six month intervals from the due date on the initial checklist, the TO Contractor shall update and resend the checklist to DoIT.

SECTION 2 - SCOPE OF WORK

2.1 PURPOSE AND BACKGROUND

2.1.1 PURPOSE

The Maryland Department of the Environment, Office of Information Management & Technology is issuing this CATS II TORFP to obtain technical consulting, development and implementation services to implement the Department's Centralized Node 2.0 Network Exchange System. These services will include the configuration and installation of a COTS Centralized Node 2.0 using a .NET framework at MDE and the configuration, development, and implementation of MDE's EPA Data Flow Exchanges through the Node 2.0. Node 2.0 software adheres to the latest version of the Network Exchange Protocol (version 2.0), Network Node Functional Specification (version 2.0), and Network Web Service Definition Language (WSDL, version 2.0). The EPA Data Flows refers to those data flows identified by the US Environmental Protection Agency (EPA) Exchange Network Leadership Council in the Exchange Network Strategic Plan (http://www.exchangenetwork.net), as data used in National and Regulatory Data Systems.

This TORFP will specifically address the following:

- ❖ Implementation of a .NET framework deployment of a Node 2.0 at MDE for both inbound and outbound Simple Object Access Protocol (SOAP) requests that supports Node versions 1.1 and 2.0 concurrently.
- ❖ Development, configuration, implementation and migration of EPA Data Flows utilizing the Department's Centralized Node 2.0 Network Exchange System.
- ❖ Integration of the Department's One-Stop Application with the Node 2.0 to form the Department's Centralized Node 2.0 Network Exchange System.
- ❖ Integration of Exchange Network and State Security Standards within the Node 2.0 and MDE's technical infrastructure.

2.1.2 REQUESTING AGENCY BACKGROUND

The mission of the MDE is to protect and restore the quality of Maryland's air, water, and land resources. The agency fosters smart growth, economic development, and healthy and safe communities. This includes quality environmental education for the benefit of the environment, public health, and future generations. The Department accomplishes its mission by assessing, preventing, and controlling sources of environmental pollution to foster a better quality of life for all Marylanders.

The Department's four principal environmental Administrations are the Air and Radiation Management Administration (ARMA); the Land Management Administration (LMA); the Water Management Administration (WMA); and the Science Services Administration (SSA). A fifth Administration, the Administrative Services Administration (ASA), is responsible for managing personnel, fiscal and procurement activities. The agency operates a Baltimore-based headquarters with regional facilities located in Annapolis, Frostburg, Centerville, Cambridge, Salisbury, and Hagerstown. MDE presently employs a staff of over 1000, which is predominantly comprised of engineers and scientists. Approximately 850 employees are located at the headquarters location.

The Office of Information Technology and Management provides centralized technical support for the Department. The Information Management, Data Integration and Data Access Division will have the primary responsibility for the on-going support and maintenance of the Network Exchange Solution. This unit has

adopted Microsoft's .NET framework as the application development standard, using primarily Visual Basic .NET for programming purposes.

2.1.3 PROJECT BACKGROUND

The Maryland Department of the Environment, Office of Information Technology is required to exchange data from the Department's various Business Programs to the EPA, and to share this data with other State partners. The EPA has developed the Central Data Exchange (CDX) which States use to exchange data.

The Node 2.0 will provide MDE with a point of presence on the EPA Exchange Network. Essentially, a Node is software running on a server that securely initiates and responds to requests for information. EPA Exchange Network partners connect their Nodes to databases so that they can securely share their environmental data. Using web services and eXtensible Markup Language (XML), Nodes can facilitate exchanges of information between EPA Exchange Network Partners or publish data to a website for public consumption. To provide for ease of implementation, and cost efficiencies, MDE is seeking to implement a COTS or already existing .NET Node 2.0 solution.

MDE has received three Information Technology grants from the EPA to develop processes for data submission to the EPA. The common goal of these grants is to develop and implement an integrated and secure data quality verification and data collection system for environmental data to be shared with the EPA and with other Network Partners. This goal is intended to eliminate the need for MDE staff to perform double data entry of the information into both MDE's Enterprise Environmental Management System (EEMS) as well as into the EPA data collection site.

In addition to the data feeds provided through the Information Technology grants, MDE provides data feeds to the EPA from legacy system sources. These feeds are either manually sent to the EPA or are transferred through the existing XAware Network Node 1.1. The existing Node 1.1 is in limited use at MDE.

The EPA is requiring that all data exchange partners upgrade their Nodes to version 2.0 to provide consistent features and services. The Central Data Exchange, which is a point of entry to the Environmental Information Exchange Network (Exchange Network) for environmental data submissions, anticipates supporting dual end-points for Node 1.1 and Node 2.0, for approximately 18 months after adoption of Node 2.0 by the Exchange Network governance. Node 2.0 does not fundamentally change the architecture of the Exchange Network, but it is necessary for the re-alignment of data and the data feeds with industry standards. The Exchange Network governance does not yet have a hard stop date for supporting submissions from Node 1.1, but the expectation is that all Nodes must eventually be upgraded to Node 2.0.

To centralize data exchanges, MDE has a developed a customized application called One-Stop. The One-Stop application is used to perform Quality Assurance/Quality Control (QA/QC) on each specific data flow, and to write well formed XML and other file formats to send data to the CDX and EPA Systems.

2.1.4 ROLES AND RESPONSIBILITIES

- 2.1.4.1 The TO Contractor's responsibilities include, but are not limited to, the following: point of contact to the TO Manager, overall contract management, submission of Deliverable Product Acceptance Form and Invoices, Change Requests, risk mitigation, management of subcontractors, updates to the Project Management Plan and Project Schedule and weekly reports.
- 2.1.4.2 TO Manager's responsibilities include, but are not limited to, the following: liaison between the TO Contractor and the State, oversight of daily operations and maintenance, receive Work Orders and NTPs from the State, authority to commit additional work of TO Contractor's staff, receive evaluation forms and address any necessary remediation plans.
- 2.1.4.3 TO Contractor Project Manager is responsible for organizing and leading the team charged to deliver the project goals by accomplishing all of the project tasks. He/she applies skill,

knowledge, tools, and techniques to lead the Project Team. The TO Contractor Project Manager will work with the MDE Project Manager and assist in the development, and regular review and update of the PMP, project schedule and the associated project management plans (Project Scope Definition and Management, Quality Management Plan, Integration Management Plan, Communications Plan, Risk Management Plan, Resource Schedule and Management Plan, Change Management Plan, and Work Breakdown Structure). The TO Contractor Project Manager shall utilize industry standard Project Management tools and techniques to plan, execute, monitor, control, and close the TO Contractor Project. The TO Contractor Project Manager shall coordinate the delivery and acceptance of deliverables through the defined agency process.

- 2.1.4.4 MDE Project Manager is responsible and accountable for the successful execution of the project. The MDE Project Manager receives authority to execute the project via the signed Project Charter. The MDE Project Manager is responsible for creating and maintaining the Master Project Schedule. The MDE Project Manager is responsible for performing a monthly review of the project financials. The MDE Project Manager must effectively balance and influence the competing project constraints of scope, quality, schedule, budget, resources and risks. Each project has unique requirements, which may evolve throughout the life cycle via progressive elaboration. In order to manage change effectively, the MDE Project Manager shall establish Integrated Change Control. The MDE Project Manager is responsible for the success of the project through the Implementation Phase of the project.
- 2.1.4.5 Key personnel staffing will be based on the TO Contractor's proposed solution and shall meet the requirements of the labor categories as described in the CATS II RFP.

2.1.5 WORK LOCATION AND HOURS

- 2.1.5.1 Key personnel will be located at MDE's Headquarters at 1800 Washington Blvd, Baltimore, MD 21230 unless otherwise agreed to by the TO Manager and the TO Contractor.
- 2.1.5.2 Services may involve some evening and/or weekend hours performing planned system upgrades in addition to core business-day hours. Hours performing system upgrades would be billed on actual time worked at the rates proposed.
- 2.1.5.3 Core work hours are Monday through Friday from 9:00 AM to 5:00 PM excluding State holidays and Service Reduction days.

2.2 SYSTEM COMPONENTS & MDE's TECHNICAL ENVIRONMENT

2.2.1 CENTRALIZED NODE 2.0 EXCHANGE NETWORK COMPONENTS

MDE's Exchange Network includes several different components that are not yet fully integrated:

- EEMS/TEMPO Enterprise Environmental Management System, which is the primary source of the data reported to EPA. EEMS is comprised of a backend database using Oracle 10G.
- Legacy Databases that are comprised of Oracle 9i, Oracle 8, or SQL Server.
- MDE One-Stop Custom application written in .NET platform. The One-Stop is used to perform QA/QC based on the error checking of both the XML Schema, formatting, and data validation and checks. It is the interface for MDE users to review the data and identify errors prior to sending the data, and to create the files needed for submission to the EPA CDX and EPA Systems.

- MDE's Current Data Feeds Feeds that are being sent to EPA using various transfer methods and formats. See Exhibit 2-3, which shows an overview of the feeds and their stage of development that will be integrated into MDE's Network Exchange.
- Node 2.0 The planned MDE Node version 2.0 (Node 2.0 that will support versions 1.1 and 2.0 concurrently)

2.2.2 NETWORK TOPOLOGY

MDE's Network Topology is illustrated in Exhibit 2-1. The Centralized Node 2.0 Network Exchange would be integrated into MDE's current technical architecture.

MDE Network Topology **Public Version** (Last Updated: July 7, 2010) MDE's Internet Servers (13 Total servers) networkMaryland MDE Outside Montgomery Park MDE Montgomery Park MDE Core Switch ADC Mainframe SAN Switches Webfleet Non-SAN ached Servers (37 Total) SAN ached Servers (16 Total) SAN Storage Master Field Offices MDE Servers (Seven Locations in MDE's Data Center roughout State; three servers at various locations) IBI MDE HQ Server MDE Equipment in MDE's North Building Internet Backup Tape Library

Exhibit 2-1 - MDE's Network Topology

2.2.3 MDE'S TECHNICAL ENVIRONMENT

2.2.3.1 **CURRENT WORKSTATION SOFTWARE:**

- Operating System: Windows XP SP3
- Internet Explorer 8

2.2.3.2 CURRENT DATABASE SOFTWARE

- Oracle 10g (10.2.0.3), Oracle 9i, and Oracle 8i (8.1.7x)
- Microsoft SQL Server 7, SQL Server 2000, SQL Server 2005, and SQL Server 2008
- Microsoft Access 97, 2000, 2003
- Visual Fox Pro 9.0

2.2.3.3 CURRENT DEVELOPMENT SOFTWARE

- Services Oriented Architecture (SOA) and .NET programming standards using Visual Basic .NET
- Visual Fox Pro 9.0
- Visual Studio 2005/2008 (Planned: Visual Studio 2010)
- .NET Framework 2008
- XMLSPY 2010 Enterprise Edition

2.2.3.4 CURRENT STAFF SKILLS AND EXPERTISE

- Services Oriented Architecture and .NET programming standards using Visual Basic .NET
- Programming skills using Microsoft Visual Studio 2005/2008 to produce VB.NET and ASP.NET program code
- SQL and PL/SQL using Oracle 10.2.0.3 and Oracle 8i (8.1.7x)
- VB Scripting
- Writing, reading, converting, and generating XML files

2.2.3.5 **CURRENT HARDWARE**

- Hewlett Packard (HP) Proliant ML570
- HP Proliant DL360 G3
- HP Proliant DL360 G4

- HP Proliant DL360 G4p
- HP Proliant DL360 G5
- HP Proliant DL360 G6
- HP Proliant DL380 G3
- HP Proliant DL380 G4
- HP Proliant DL380 G5
- HP Proliant DL380 G6
- HP Proliant DL380 G7
- HP Proliant DL580 G2
- Sun Microsystems Fire V240
- Sun Microsystems Fire V245

2.2.4 CURRENT MDE DATA FLOWS

MDE has eleven (11) data flows that are a part of this contract. The WQX data flow is the only data flow that utilizes MDE's Node 1.1. The remaining production Data Flows are not currently processed through a Node, but are manually transferred. These Data Flows are either being planned, developed, or are in production as depicted in Exhibit 2-3.

- AIRS Facility Subsystem AFS
- Air Quality Subsystem AQS
- eBeaches Monitoring
- Emission Inventory System EIS (NEI/HAP)
- Facility Registry System FRS
- Integrated Compliance Information System/Discharge Monitoring Report ICIS/DMR
- Resource Conservation Recovery Act Compliance and Enforcement RCRA-CME
- Resource Conservation Recovery Act RCRAInfo Handler
- Safe Drinking Water Information System SDWIS
- Toxic Release Inventory TRI
- Water Quality Exchange WQX

MDE to EPA DATA EXCHANGE EPA **Dotted Line = Under Development** Cross Media Solid Line = Developed FRS MDE Community WATER WATER WASTE **TEMPO** WASTE Mdent-06 WATER PDW WATER Mdent-06 Storet WATER (Node 1.1) WATER Mdent-06 WATER **NOTES** MDE has a NODE 1.1 that is in limited use for transferring data. Data is being exchanged using the following 2 Methods: TRI ► Direct Entry Mdewin15US Into EPA System AIR AQS ► Electronic File ENVIEW (SQL) transfer

Exhibit 2-3 – MDE Current Data Flows

Exhibit 2-4 – MDE's Data Flow Status and Data Submission Methods

Exchange	Status and Anticipated Production Date	Submit Via EPA CDX Exchange	Frequency of Submission	Integrate into MDE One -Stop	Source Database	File Format
AFS - Air Facility	Development: Anticipated Production Date: 4/2012	No - sent directly to EPA AFS System	Monthly or As Needed	V	Oracle 10G	.txt
AQS - Air Quality	Development: Anticipated Production Date: 6/2012	Yes - CDX	At least quarterly		Oracle 10G	XML
eBeaches (Monitoring)	Production	Yes - CDX	Annual		Oracle 10G	XML
EIS- Emissions Inventory System	Production	Yes- CDX	Annual	V	Oracle 10G	XML
FRS - Facility Registry System	Production	Yes - CDX	As Needed		Oracle 10G	XML
ICIS – NPDES	Planning: Anticipated Production Date: 6/2012	Yes - CDX	Weekly or As Needed	V	Oracle 10G	XML
RCRAINFO - Hazardous Waste – CME	Development: Anticipated Production Date: 5/2012	Yes - CDX	Daily or As Needed	V	Oracle 10G	XML
RCRAINFO - Hazardous Waste – Handlers	Production	Yes - CDX	Weekly or As Needed	V	Oracle 10G	XML
SDWIS - Safe Drinking Water Info	Production	Yes - CDX	Quarterly		Oracle 9i	XML
TRI - Toxic Release Inventory	Planning: Anticipated Production Date: 5/2012	Yes - CDX	Annual		Oracle 10G	XML
WQX - Water Quality	Development: Anticipated Production Date: 6/2012	Yes - CDX	Weekly or As Needed		Oracle 10G	XML

2.2.5 PROJECT APPROACH

The TO Contractor shall implement a Network Node 2.0 using a .NET framework and configure the associated hardware and software for both a Development/Test and Production Node 2.0 environment to enable MDE staff to design, develop, configure, test, implement, and manage the Network Node and MDE's data flows.

The TO Contractor shall perform all work defined in this TORFP in accordance with the State's System Development Life Cycle (SDLC) methodology, Project Management Institute's Project Management Body of Knowledge (PMBOK) guide and other policies and procedures as identified Section 2.5.

The Project as defined within this TORFP consists of the following:

- Define the process to implement the Node 2.0 at MDE.
- Meet with IT staff and MDE Business Program staff to define the detailed system and functional requirements for implementing MDE's data flows. The TO Contractor shall use the high level requirements provided by MDE in ATTACHMENT 14 as reference information for completing this task.
- Migrate existing data flows and develop and implement planned data flows.
- Design, develop, configure, install, test and deploy MDE Centralized Node 2.0 Network Exchange.
- Provide Node 2.0 Configuration Documentation and Security Configuration Documentation.
- Provide training on the use and maintenance of the Node 2.0 solution.

2.2.5.1 CONCEPTUAL DESIGN OF MDE'S NODE 2.0 NETWORK EXCHANGE SYSTEM

The conceptual design of the system identifies the high level functionality of the proposed centralized Network Exchange including:

- A centralized area for QA/QC that checks and validates the data based upon the specific requirements of each data flow.
- A centralized development environment that communicates with the production environment.
- A production environment that is able to automatically receive, solicit, and submit data via Node to Node communication to the EPA Systems and State Partners.
- A secure integrated network environment in which it is easy to add and authenticate new users.
- An event driven, electronic notification system at the individual data flow level, to notify users when specified events are triggered.
- A secure environment that is capable of activity logging, scheduling and routing data flow exchanges via Node to Node.
- The conceptual environment as presented in Exhibit 2-5.

Exhibit 2-5- Conceptual Diagram Showing MDE's Centralized Node 2.0 Network Exchange Integration

MDE CENTRALIZED NODE 2.0 NETWORK EXCHANGE FUTURE CONCEPTUAL VIEW MDE Data Sources **EPA SYSTEMS MDE Client** Side Application TEMPO CROSS MEDIA Transfer .xml .txt MDE ONE-STOP EXCHANGE **EPA** PDW WATER **NODE MDE** NODE 2.0 NEI/HAP Development Test SSA Desktop Environment WASTE **MDE** NODE 20 STATE PARTNERS' NODE Ready for Production Production Environment Transfer - .xml .txt ENVIEW

(SQL)

2.3 STATEMENT OF WORK

The TO Contractor shall perform the following tasks to fulfill the technical requirements of this TORFP:

2.3.1 Task 1 - Project Initiation

2.3.1.1 Performance Objective

The TO Contractor shall provide the necessary staff resources to participate in the project initiation kick off meeting, and to develop the TO Contractor's Project Management Plan (PMP) and Project Schedule. The TO Contractor PMP shall include, at a minimum, project scope definition and management, change management, integration management, quality management plan, communications management plan, risk management plan, project schedule, resource schedule, resource management and work breakdown structure (WBS). All plan documents shall be updated, maintained and distributed throughout the life cycle of the project.

2.3.1.2 Set of Measurable Benefits/Improvements Outcomes

Measurable outcomes are to provide the MDE with a detailed Project Management Plan and Project Schedule Documents and to participate in the Project Kick-off meeting with the MDE.

2.3.1.3 Technical Requirements

The TO Contractor Project Manager shall utilize industry standard Project Management techniques and tools to plan, execute, monitor, control and close the Centralized Node 2.0 Network Exchange Project.

- 2.3.1.3.1 TO Contractor Project Manager shall utilize the high level requirements identified in this TORFP to develop a detailed PMP for implementation of the MDE Centralized Node 2.0 Network Exchange that includes:
 - Project Scope Definition and Management
 - Quality Management Plan
 - Integration Management Plan
 - Communications Plan
 - Risk Management Plan
 - Resource Schedule and Management Plan
 - Change Management Plan
 - Work Breakdown Structure
- 2.3.1.3.2 TO Contractor Project Manager shall utilize the high level requirements identified in this TORFP to develop a Project Schedule using Microsoft Project 2003. The TO Contractor's Project Schedule will be merged with the MDE Master Project Schedule and shall be used by both the TO Contractor and the MDE PM to monitor and track progress and take corrective actions where needed. The TO Contractor's Project Schedule shall take into account State holidays and service reduction days.
- 2.3.1.3.3 TO Contractor Project Manager shall ensure that key personnel participate in a Kick-off meeting in which the TO Contractor Project Manager will present the TO Contractor's Project Management Plan, Project Schedule, and overall approach to completing the Tasks defined in this TORFP.

2.3.2 Task 2 – Centralized Node 2.0 Network Exchange System Implementation Plan

2.3.2.1 Performance Objective

The objective of this task is to develop detailed planning documents for the design, development, configuration, testing, and implementation of the new MDE Centralized Node 2.0 Network Exchange.

2.3.2.2 Set of Measurable Benefits/Improvements Outcomes

This task establishes an integrated and secure infrastructure that centralizes and supports communication with Federal, State, and public partners for data by:

- Providing a secure .NET framework of a Node 2.0 for both inbound and outbound SOAP Requests;
- Improving MDE's ability to transfer data to EPA Systems by developing, configuring and implementing EPA Data Flows;
- Integrating the Department's One-Stop Application, the Node 2.0 Production Environment and the Node 2.0 Development/Test Environment to create the Department's Centralized Node 2.0 Data Exchange Network;
- Implementing and executing the monitoring of requests and responses for MDE public data;
- Implementing security standards within the Node 2.0 and within MDE's technical infrastructure; and
- Training of up to 15 MDE staff on the configuration, specifications, operation and maintenance of the Department's Centralized Node 2.0 Network Exchange.

2.3.2.3 Technical Requirements

At a minimum the TO Contractor shall perform the following tasks

- 2.3.2.3.1 The TO Contractor shall prepare an Implementation Plan that presents individual baselined plans for system configuration, data cleanup, data flow development, data flow migration, installation/deployment, integration, testing, and performance tuning of the systems to include, but not limited to the database, operating systems, server hardware and network devices provided by the TO Contractor in a production environment at MDE. The Implementation Plan will include:
- 2.3.2.3.2 System and Functional Requirements Document that gathers and details the system and functional requirements needed to design and develop the MDE Centralized Node 2.0 Network Exchange System. TO Contractor will perform a Fit Gap analysis between the COTS Node 2.0 and detail requirements. The TO Contractor shall develop, baseline, and maintain a Requirements Traceability Matrix throughout the life cycle of the project as provided in ATTACHMENT 15. The TO Contractor shall use ATTACHMENT 14, High Level System and Functional Requirements Document as reference information in completing this task.
- 2.3.2.3.3 Data Flow Design Document for designing, developing, configuring, migrating and implementing MDE's EPA Data Flows. The TO contractor shall validate how each Data Flow will be integrated into the overall Departmental Centralized Node 2.0 Network Exchange, identifying current processes, outputs, interfaces, data requirements and security controls. The TO Contractor shall use the High Level Systems and Functional Requirements Document included in ATTACHMENT 14 as reference information in completing this task. This document shall define the supported data services and processes that are used to exchange information for each data flow.
- 2.3.2.3.4 Data Cleanup and QA/QC Plan that details the activities necessary to clean-up data prior to submission of the data flows. This document shall describe the Node 2.0 data validation activities, including the ability

- to automatically mark records that fail QA/QC based upon MDE business rules and the rules applied by the EPA.
- 2.3.2.3.5 Integration Testing Plan for testing, verifying and validating the overall integration of the proposed MDE Centralized Node 2.0 Network Exchange into MDE's technical environment.
- 2.3.2.3.6 Node 2.0 Security Configuration and Authentication Plan. This plan shall comply with the EPA's security standards and the State of Maryland Data Security Standards and Policies and MDE's OIMT Policies and Practices.
- 2.3.2.3.7 Performance and Acceptance Plan for testing, verifying, and validating the performance of the data flows and the proposed MDE Centralized Node 2.0 Network Exchange solution.
- 2.3.2.3.8 Hardware/Software Configuration Plan that specifies and describes all needed hardware, software, licenses, hardware maintenance agreements, and software maintenance agreements for the MDE Centralized Node 2.0 Network Exchange. The MDE reserves the right to procure any or all of these items through other procurement vehicles. This document shall describe how the .NET Node 2.0 shall be deployed within the Department's physical environment. This document shall include a network architectural/topological drawing and written documentation describing how the system functions and the prescribed requirements for optimal performance and load balancing. The TO Contractor shall use, as provided by MDE, the System and Functional Requirements Document included in ATTACHMENT 14 as reference information in completing this task.
- 2.3.2.3.9 Administrator and User Training Plan that details the training curriculums for the data flow configuration, specifications, and operations and maintenance of the MDE's Centralized Node 2.0 Network Exchange.
- 2.3.2.3.10 TO Contractor shall provide a statement granting State ownership of any code that requires customization.

2.3.3 Task 3 – MDE Centralized Node 2.0 Network Exchange System Implementation

2.3.3.1 Performance Objective

The objective of this task is to implement the MDE Centralized Node 2.0 Network Exchange System in accordance with the System and Functional Requirements resulting from Task 2, and other requirements contained in this TORFP. The TO Contractor shall provide the necessary labor, hardware, software, licenses, software maintenance and hardware maintenance necessary to implement the proposed MDE Centralized Node 2.0 Network Exchange in accordance to the Hardware/Software Configuration Plan resulting from Task 2 and the MDE required DMZ architecture described in Section 2.2.3 and Exhibit 2-2, and MDE's Data Exchange Network Future Conceptual View as shown in Exhibit 2-5. The installation and configuration will be required for the Development/Test and Production Environments and will ensure concurrent support for Node versions 1.1 and 2.0 for both inbound and outbound communications.

2.3.3.2 Set of Measurable Benefits/Improvements Outcomes

This task will result in the deployment of a fully tested Node 2.0 that can be used by MDE, the EPA and other State Partners to more efficiently transfer validated data through the MDE Centralized Node 2.0 Network Exchange

- Providing a secure .NET framework of a Node 2.0 for both inbound and outbound SOAP Requests;
- Improving MDE's ability to transfer data to EPA Systems by implementing EPA Data Flows;

- Integrating the Department's One-Stop Application, the Node 2.0 Production Environment and the Node 2.0 Development/Test Environment to create the Department's Centralized Node 2.0 Data Exchange Network;
- Implementing and executing the monitoring of requests and responses for MDE public data;
- Implementing security standards within the Node 2.0 and within MDE's technical infrastructure; and
- Training of up to 15 MDE staff on the configuration, specifications, operation and maintenance of the Department's Centralized Node 2.0 Network Exchange.

2.3.3.3 Technical Requirements

At a minimum, the TO Contractor shall perform the tasks outlined below.

- 2.3.3.4 The TO Contractor shall provide detailed documentation of the Centralized Node 2.0 Network Exchange Hardware and Software System Installation, Configuration, Security Specification, Operations and Maintenance Documentation for MDE OIMT Staff. These documents will be provided in Microsoft Word and will provide OIMT Staff, at a minimum, with the procedures and system information required to install and configure the Centralized Node 2.0 Network Exchange System, perform routine operations and maintenance on the system, and reference configuration settings and system specifications.
- 2.3.3.5 The TO Contractor shall document all Centralized Node 2.0 Network Exchange System configuration settings and maintain the accuracy of this information until the end of the 90 calendar day production warranty period (Section 2.3.3.11.
- 2.3.3.6 The TO Contractor shall specify and purchase MDE approved Node 2.0 Hardware, Software, Licenses for up to 15 concurrent users, Hardware Maintenance, and Software Maintenance as proposed in Section 2.3.2.3.8. The MDE reserves the right to procure these items through other procurement vehicles.
- 2.3.3.7 The TO Contractor shall implement the MDE Centralized Node 2.0 Network Exchange System in accordance with the approved MDE Centralized Node 2.0 Network Exchange System Implementation Plan to include installation, configuration, testing, data cleanup and data QA/QC, data flow plug-ins, development of data flows and data flow migration, authentication methods for web services, establishing the protocol for inbound and outbound communication, generation of log files and performance tuning of the systems to include, but not limited to the Node 2.0, database, servers, operating systems, server hardware and network devices in the production and development environments at MDE. MDE OIMT Staff will be available over a two (2) week period to confirm the TO Contractor test results and system functionality as well as provide coordination and support to the TO Contractor when the new MDE Centralized Node 2.0 Network Exchange System is moved into the MDE production environment.
- 2.3.3.8 The TO Contractor shall perform MDE's Centralized Node 2.0 Network Exchange System integration testing and reporting in accordance with the approved MDE Integration Test Plan.
- 2.3.3.9 The TO Contractor shall perform MDE's Centralized Node 2.0 Network Exchange System performance and acceptance validation testing and reporting in accordance with the approved MDE Performance and Acceptance Plan.
- 2.3.3.10 The TO Contractor shall conduct training sessions for up to a total of 15 MDE designated Centralized Node 2.0 Network Exchange System end-users and administrators on the use and administration of the MDE Centralized Node 2.0 Network Exchange System in accordance with the MDE approved Administrator and User Training Plan including submission of the MDE Centralized Node 2.0 Network Exchange System training materials. Training will be performed at the MDE training room in the Baltimore, MD Headquarters office. The MDE training room can accommodate a maximum of 20

trainees per training session. Training materials can be provided as Online Help Documents, Video/Multimedia tutorials, or other electronic document formats such as Word or PDF.

2.3.3.11 The TO Contractor shall provide a 90 calendar day warranty period for the MDE Centralized Node 2.0 Network Exchange System once the system is fully deployed and operational in the MDE production environment.

Commencing with the acceptance of Task 2.3.3.7 and 2.3.3.9 and continuing for a period of 90 calendar days ("Warranty Period") the TO Contractor will provide the service categories that are described in the TO Contractor's Technical Proposal Section 2.3.3.11 and further clarified as:

Defect Reporting and Response - The TO Contractor shall provide a hotline number and email address for MDE to use to report Defects. If MDE believes that released production Centralized Node 2.0 Data Exchange System contains a Category 1, Category 2, or Category 3 Defect, a Defect Claim Form shall be submitted by the MDE Project Manager, or designee, to the TO Contractor (suggested content for the Defect Claim Form is described below) in accordance with the Defect Reporting Process identified below. The hours of hotline operations will be:

State Business Days: 6 AM – 9 PM

Defect Claim Form must include:

Non State Business Days:

- A complete description of the alleged Defect;
- Instructions on the data or scenarios(s) necessary to reproduce the reported Defect;
- The software version(s) in which the Defect appears; and

6 AM - 6 PM

- The category of Defect, from the following options:
 - Critical Defect (Category 1) An emergency situation to a critical business function in which a function is inoperable in such a way that it is not usable in a production environment, produced incorrect results or fails catastrophically.
 - High Defect (Category 2) A Defect that produced a detrimental situation in which performance (throughput or response) of a function degrades substantially producing a severe impact.
 - Medium or Low Defects (Category 3) A situation in which a module is usable, but does not provide a function in the most convenient or expeditious manner, and the user is still able to perform their job function (i.e., a work-around is available).

Defect Tracking - The TO Contractor shall manage all warranty requests and resolution statuses in a tracking database. The TO Contractor shall provide MDE with a monthly extract of the defect tracking database in digital format showing:

- a) Unique identifier
- b) Description
- c) Cause
- d) Status of defect
- e) Date open, closed
- f) Expected completion
- g) Final/suspected resolution
- h) Follow-up

i) Defect Resolution

Defect Reporting Process - At a minimum, the Defect Claim Form shall contain a complete description of the alleged Defect, including instructions on the data or scenario(s) necessary to reproduce the reported Defect. Upon receipt of the Defect Claim Form, the TO Contractor shall attempt to recreate the reported Defect within MDE's operating environment using the software version(s), data, and instructions submitted on the claim form to establish/validate the categorization of the reported defect. If the TO Contractor is unable to reproduce the Defect, the TO Contractor will directly contact the MDE Project Manager for further information and clarification.

The TO Contractor shall address system issues relating to MDE's Centralized Node 2.0 Network Exchange System services according to predefined service levels. The State has the authority to establish and modify the priorities.

Level	Category	Description	Service Level
Critical Defect -	Severe Problem	An emergency situation to	Notification to the TO
Category1		a critical business function	Manager within 30
		in which a service, access,	minutes; resolution within
		functionality is inoperable	1 business day (during the
		in such a way that it is not	hours of Hotline
		usable in a production	Operations)
		environment, produced	
		incorrect results or fails	
		catastrophically and no	
		readily available	
		alternative solution or	
		workaround exists for	
		established service levels.	
High Defect - Category 2	Severe Problem	A service, access,	Notification to the TO
		functionality is	Manager within 1 hour;
		unavailable or defect that	work towards resolution
		produced a detrimental	within 2 business days
		situation in which	(during the hours of
		performance (throughput	Hotline Operations)
		or response) of a function	
		degrades substantially	
		producing a severe impact,	
		but a readily available	
		alternative solution or	
		workaround does exist.	
Medium or Low Defect-	Isolated Problem	A situation in which a	Notification to the TO
Category 3	Degraded Performance	module is usable, but does	Manager within 3 business
	Change Management	not provide a function in	days; work towards
	Configuration Control	the most convenient or	resolution (during the
		expeditious manner, and	hours of Hotline
		the user is still able to	Operations)
		perform their job function	
		or is limited to a few users,	
		but a readily available	
		alternative solution or	
		workaround does exist.	

2.3.4 <u>Task 4 - Optional Services: MDE Centralized Node 2.0 Network Exchange Maintenance and Support Services</u>

MDE may require maintenance and support for the MDE Centralized Node 2.0 Network Exchange System. The Department may issue Task Orders describing the services required. The TO Contractor shall respond to the TO with a Task Order Proposal (TOP) that includes the labor categories required to satisfy the request, the estimated number of hours required for each labor category, the deliverables, the total estimated effort and cost, and the estimated start and finish date for the TO. Upon acceptance of the TOP the Department will issue a NTP to the TO Contractor. All additional services will be provided on a time and materials basis, NTE specified amount. Invoicing and payment shall be based on task order completion.

2.3.4.1 Maintenance and Support services may include:

- Writing queries that limit records sent to the XML format based on Validation Checks.
- Writing export routines from the source database.
- Developing COM calls using Methods and parameters.
- System Interface Development.
- Security and Authentication Support.
- MDE Centralized Node 2.0 Network Exchange Maintenance.
- Operations and Maintenance Support.
- Set-up, deployment and tuning for network and server equipment.
- Developing screens to display Data Flow specific information in a user friendly environment for MDE users
- Developing query screens to retrieve and display Data Flow specific information.
- Security Analysis.
- Establishing Quality Assurance Plans.
- Establishing the criteria for Trading Partner Agreements.

2.3.4.2 <u>Labor Categories and Qualifications</u>. The following section describes the task duties to be provided for the Optional Services:

2.3.4.2.1 Task Category #1: MDE Centralized Node 2.0 Network Exchange Maintenance and Support

Duties: MDE may require additional maintenance and support services for the MDE Centralized Node 2.0 Network Exchange System in the work areas of hardware, software, network systems support, maintenance and upgrades. The TO Contractor system support personnel would conduct informal knowledge transfer sessions by working closely with MDE staff during web maintenance activities. TO Contractor personnel shall be able to analyze information requirements, evaluate problems with Data Flows, the Node 2.0 Environment, modify Data Flows, develop and establish Quality Assurance Plans, test and correct security vulnerabilities, plan and develop appropriate corrective action plans and other programming required to support the MDE Centralized Node 2.0 Network Exchange.

2.3.4.3 Personnel

a) General Requirements: The TO Contractor shall be responsible for providing, during the life of the contract, the personnel required in this TORFP within the timeframe required as specified by the TO Manager and in accordance with the Resource Management Plan.

2.3.4.4 Weekly Status Report

By 10:00 am, EST, on the Monday following the conclusion of each work week, the TO Contractor shall be responsible for compiling and submitting to the TO Manager, a status report that summarizes the following:

- Overall status and assigned work efforts completed during the reporting period, work that was
 expected to be completed during the reporting period that remains incomplete, work planned
 for the upcoming reporting period, work that is on-hold, and any issues or concerns identified
 during the reporting period. Updated Project Schedule information to be provided in Microsoft
 Project format (mpp) or other MDE approved format.
- Emergency work efforts and issues identified.
- Hours worked and tasks performed by individual TO Contractor personnel during the reporting period.
- Financial status of the work performed including work billed, work unbilled, obligated work not started, a total of invoiced, unbilled, and obligated work, and any work under consideration.

2.4 DELIVERABLES

For each written deliverable, draft and final, the TO Contractor shall submit to the TO Manager one hard copy and one electronic copy compatible with Microsoft Office, Microsoft Project and/or Visio.

A draft of a deliverable is required no later than two (2) weeks in advance of when the final deliverable is due. Written deliverables defined as draft documents must demonstrate due diligence in meeting the scope and requirements of the associated final written deliverable. A draft written deliverable may contain limited structural errors such as poor grammar, misspellings or incorrect punctuation, but must:

- A. Be presented in a format appropriate for the subject matter and depth of discussion.
- B. Be organized in a manner that presents a logical flow of the deliverable's content.
- C. Represent factual information reasonably expected to have been known at the time of submittal.
- D. Present information that is relevant to the Section of the deliverable being discussed.
- E. Represent a significant level of completeness towards the associated final written deliverable that supports a concise final deliverable acceptance process.

Upon completion of a deliverable, the TO Contractor shall document each deliverable in final form to the TO Manager for acceptance. The TO Contractor shall memorialize such delivery in an Agency Receipt of Deliverable Form (Attachment 8) unless otherwise specified in this TORFP. The TO Manager shall countersign the Agency Receipt of Deliverable Form indicating receipt of the contents described therein.

Upon receipt of a final deliverable, the TO Manager shall commence a review of the deliverable as required to validate the completeness and quality in meeting requirements. Upon completion of validation, the TO Manager shall issue to the TO Contractor notice of acceptance or rejection of the deliverables in a Deliverable Product Acceptance Form (DPAF) (Attachment 9) unless otherwise specified in this TORFP. In the event of rejection, the TO Contractor shall correct the identified deficiencies or non-conformities. Subsequent project tasks may not continue until deficiencies with a deliverable are rectified and accepted by the TO Manager or the TO Manager has specifically issued, in writing, a waiver for conditional continuance of project tasks. Once the State's issues have been addressed and resolutions are accepted by the TO Manager, the TO Contractor will incorporate the resolutions into the deliverable and resubmit the deliverable for acceptance. The TO Manager shall retain the original copies of the signed Agency Receipt of Deliverable Form and signed DPAF forms to memorialize the delivery. Accepted deliverables shall be invoiced within 30 days in the applicable invoice format (Reference Section 2.9 Invoicing).

A performance period will begin after all applicable deliverable products and services comprising the Contractor's support have been installed and all applicable deliverables have been accepted. The performance period will be for a period of 90 calendar days unless otherwise specified in the Contract to allow for adequate testing of all functionality, including any and all processes and interfaces. The time periods for any performance and warranty periods will be at the minimum noted in the original scope of work but may also be addressed in subsequent plans such as the Project Management Plan, Project Schedule, and Work Breakdown Structure.

The State required deliverables are defined below. Performance by the TO Contractor shall be measured by the quality of each required deliverable and shall be rated each month, or at the time the required deliverable is due per the master project schedule, in conjunction with deliverable performance procedures (Section 2.4.4).

Within each task, the TO Contractor may suggest other subtasks or deliverables to improve the quality and success of the project.

2.4.1 Milestone 1: Task 1 - Project Initiation (Section 2.3.1)

- a) **Deliverable 1-1: Project Management Plan** The TO Contractor shall develop and maintain a detailed Project Management Plan as specified in TORFP Section 2.3.1 using either the State SDLC template (http://doit.maryland.gov/policies/Documents/sdlc/sdlcvol4.pdf) or TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = Project Management Plan (Microsoft Word), Presentation of Project Management Plan to TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- b) **Deliverable 1-2: Project Schedule** The TO Contractor shall develop a baseline Project Schedule and maintain all updates to the baselined Project Schedule throughout the life of the contract as specified in TORFP Section 2.3.1 using either the State SDLC template (http://doit.maryland.gov/policies/Documents/sdlc/sdlcvol4.pdf) or TO Contractor proposed format approved by the TO Manager.
 - Deliverable(s) = Project Schedule (Microsoft Project), Presentation of a baselined Project Schedule to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- c) **Deliverable 1-3: Kick-off Meeting -** The TO Contractor shall participate in a Project Kick-off Meeting as specified in TORFP Section 2.3.1 and shall document the meeting minutes using Microsoft Word in a format proposed by the TO Contractor and approved by the TO Manager.
 - Deliverable(s) = Participate in Project Kick-off Meeting and submission of the Kick-off meeting minutes in Microsoft Word. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.

2.4.2 Milestone 2: Task 2 – MDE Centralized Node 2.0 Network Exchange System Implementation Plan (Section 2.3.2)

a) **System and Functional Requirements Document-** The TO Contractor shall gather and develop the detailed system and functional requirements specified in TORFP Section 2.3.2.3.2 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.

Deliverable(s) = Detailed System and Functional Requirements Document including an "As-Is" and "To-Be" analysis. This document shall include the development of the RTM and a fit-gap analysis of the COTS Node 2.0 product. (Microsoft Word, Excel and Visio or similar tools), and Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.

b) **Data Flow Design Document** - The TO Contractor shall develop a Data Flow Design Document specified in TORFP Section 2.3.2.3.3 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.

Deliverable(s) = MDE Data Flow Design Document that outlines the process necessary to complete the migration of each dataflow to the Node 2.0 (Microsoft Visio or similar tool), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.

c) **Data Cleanup and QA/QC Plan** - The TO Contractor shall develop a Data Clean Up and QA/QC Plan specified in TORFP Section 2.3.2.3.4 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.

Deliverable(s) = MDE Data Clean up and QA/QC Plan to include data mapping analysis, and data clean up plan. (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.

d) **Integration Testing Plan** - The TO Contractor shall develop an Integration Testing Plan specified in TORFP Section 2.3.2.3.5 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.

Deliverable(s) = MDE Integration Testing Plan (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9will be signed by the TO Manager.

e) **Node 2.0 Security Configuration and Authentication Plan** - The TO Contractor shall develop a Node 2.0 Security Configuration and Authentication Plan specified in TORFP Section 2.3.2.3.6 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.

Deliverable(s) = MDE Node 2.0 Security Configuration and Authentication Plan (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.

- f) **Performance and Acceptance Plan** The TO Contractor shall develop a Performance and Acceptance Plan specified in TORFP Section 2.3.2.3.7 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = MDE Performance and Acceptance Plan (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- g) **Hardware/Software Configuration Plan -** The TO Contractor shall develop a Hardware/Software Configuration Plan specified in TORFP Section 2.3.2.3.8 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = MDE Hardware/Software Configuration Plan (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- h) **Administrator and User Training Plan** The TO Contractor shall develop an Administrator and User Training Plan specified in TORFP Section 2.3.2.3.9 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = MDE Administrator and User Training Plan (Microsoft Word), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- i) **Statement Granting State Ownership** The TO Contractor shall provide a Statement Granting State Ownership specified in TORFP Section 2.3.2.3.10 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = Statement Granting State Ownership approved and signed by TO Contractor (PDF), Presentation of deliverable to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- 2.4.3 Milestone 3: Task 3 MDE Centralized Node 2.0 Network Exchange Implementation (Section 2.3.3)
 - a) Deliverable 3-1: Documentation for MDE Centralized Node 2.0 Network Exchange Hardware and Software System Installation and Configuration, Technical and Security Specifications, and Operational, Maintenance, and Support The TO Contractor shall develop Documentation as specified in TORFP Section 2.3.3.4 using a TO Contractor proposed format that has been reviewed and approved by the TO Manager.
 - Deliverable(s) = MDE Node 2.0 Hardware and Software System Installation and Configuration Document (Microsoft Word), Technical and Security Specifications Document (Microsoft Word), and Operational, Maintenance, and Support Document (Microsoft Word) Presentation of Documents to the TO Manager. The Deliverable Product Acceptance Form (DPAF) Attachment 9,

- shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Agency Acceptance of Deliverable Form Attachment 9 will be signed by the TO Manager.
- b) **Deliverable 3-2: TO Contractor Purchase of MDE Node 2.0 Hardware/Software/Licensing -** The TO Contractor shall propose and purchase the Node 2.0 hardware/software/licensing/hardware maintenance and software maintenance as specified in TORFP Section 2.3.3.6.
 - Deliverable(s) = Order Confirmation and Delivery Receipt(s) (Microsoft Word or Adobe PDF). The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- c) Deliverable 3-3: Implementation of the MDE Centralized Node 2.0 Network Exchange System in accordance with the MDE Centralized Node 2.0 Network Exchange Implementation Plan The TO Contractor shall implement the COTS CMS as specified in TORFP Section 2.3.3.7.
 - Deliverable(s) = Physical Implementation of the MDE Centralized Node 2.0 Data Exchange Network at the MDE data center. Demonstration of the implementation of the MDE Centralized Node 2.0 Data Exchange Network to the TO Manager and designated OIMT Staff. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager.
- d) Deliverable 3-4: Completion of the MDE Centralized Node 2.0 Network Exchange System integration testing and reporting in accordance with the approved MDE Integration Testing Plan. The TO Contractor shall perform performance and acceptance validation testing and reporting as specified in TORFP Section 2.3.3.8.
 - Deliverable(s) = Documented Integration Testing Report(s) (Microsoft Word and/or Microsoft Excel) and presentation of the deliverable to the TO Manager and designated OIMT Staff. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager
- e) Deliverable 3-4: Completion of the MDE Centralized Node 2.0 Network Exchange System performance and acceptance validation testing and reporting in accordance with the approved MDE Performance and Acceptance Plan. The TO Contractor shall perform performance and acceptance validation testing and reporting as specified in TORFP Section 2.3.3.9.
 - Deliverable(s) = Documented Performance and Acceptance Validation Testing Report(s) (Microsoft Word and/or Microsoft Excel) and presentation of the deliverable to the TO Manager and designated OIMT Staff. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9 will be signed by the TO Manager
- f) Deliverable 3-5: Complete training of MDE Staff on the MDE Centralized Node 2.0 Network Exchange System in accordance with the approved MDE Administrator and User Training Plan to include submission of the MDE Centralized Node 2.0 Data Exchange Network System training materials. The TO Contractor shall implement the approved MDE Administrator and User Training Plan, perform training and provide the MDE Administrator and User training materials as specified in TORFP Section 2.3.3.10.

Deliverable(s) = Provide training session(s) in accordance with the approved MDE Administrator

and User Training Plan to include submission of the MDE Centralized Node 2.0 Data Exchange Network Training Materials (in Microsoft Word, HTML, Adobe PDF, or other MDE approved format) as specified in TORFP Section 2.3.3. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9will be signed by the TO Manager.

g) Deliverable 3-6: MDE Centralized Node 2.0 Network Exchange in Production Use for 90 Calendar Days Warranty Period. - The TO Contractor shall warrant the MDE Centralized Node 2.0 Network Exchange System for 90 calendar days in production use as specified in TORFP Section 2.3.3.11.

Deliverable(s) = Completion of 90 Calendar Days Warranty Period as specified in TORFP Section 2.3.3. The Deliverable Product Acceptance Form (DPAF) Attachment 9, shall be submitted as specified in TORFP Section 2.4.4 for this deliverable. Only one (1) Deliverable Product Acceptance Form (DPAF) Attachment 9will be signed by the TO Manager.

2.4.4 Deliverable Acceptance

Upon completion of each Milestone, the TO Contractor shall submit all deliverables for that Milestone to the TO Manager for acceptance. The TO Contractor shall memorialize such delivery in a written AGENCY RECEIPT OF DELIVERABLE FORM (Attachment 8) which sets forth the nature and condition of the deliverables, the medium of delivery, and the date of delivery. The TO Manager will countersign such AGENCY RECEIPT OF DELIVERABLE FORM to indicate receipt of the contents described therein. The TO Manager will commence any required acceptance testing or reviews following receipt of the deliverables according to the schedule agreed upon in the project plan required by TORFP Deliverable 2.4.1. Upon completion of such testing/reviews, the TO Manager will issue to the TO Contractor notice of acceptance or rejection of the deliverables via a DPAF. In the event of rejection, the TO Contractor shall use all reasonable effort to correct any deficiencies or non-conformities and resubmit the deliverable(s) within five (5) business days, or request in writing to the TO Manager a justification for any time required beyond five (5) business days. If a deliverable is not accepted by the TO Manager, the TO Contractor shall notify the TO Manager in writing of any risks associated with schedule delays. The TO Manager may direct that follow-on work can not continue until the deliverable is either accepted by the TO Manager, or the TO Manager may opt to waive a condition associated with the deliverable.

The following MDE Deliverable Schedule is an estimate for the TO Contractor to consider when preparing the TO Contractor's Project Schedule.

Milestone Number	Deliverable	Milestone	Delivery Schedule
1	1-1	Project Management Plan	10 business days after Contract NTP
	1-2	Project Schedule	At project kick-off and updated no less than every 10 business days
	1-3	Kick-off meeting	10 business days after Contract NTP

Table 1 - MDE Deliverable Schedule

2	2-1	System and Functional Requirements Document	30 business days after Milestone 2 NTP
	2-2	Data Flow Design Document	45 business days after Milestone 2 NTP
	2-3	Data Cleanup and QA/QC Plan	60 business days after Milestone 2 NTP
	2-4	Integration Testing Plan	70 business days after Milestone 2 NTP
	2-5	Node 2.0 Security Configuration and Authentication Plan	80 business days after Milestone 2 NTP
	2-6	Performance and Acceptance Plan	90 business days after Milestone 2 NTP
	2-7	Hardware/Software Configuration Plan	100 business days after Milestone 2 NTP
	2-8	Administrator and User Training Plan	110 business days after Milestone 2 NTP
	2-9	Statement granting State Ownership	120 business days after Milestone 2 NTP
3	3-1	Documentation for MDE Centralized Node 2.0 Network Exchange System Installation and Configuration, Technical and Security Specifications, and Operational, Maintenance and Support Requirements.	60 business days after Milestone 3 NTP
	3-2	TO Contractor Purchase of Node 2.0 Hardware/Software/Licensing.	70 business days after Milestone 3 NTP
	3-3	Implementation of MDE's Centralized Node 2.0 Network Exchange System in accordance with the MDE Centralized Node 2.0 Network Exchange Implementation Plan.	80 business days after Milestone 3 NTP
	3-4	Completion of the MDE Centralized Node 2.0 Network Exchange performance and acceptance validation testing and reporting.	90 business days after Milestone 3 NTP

3-5	Complete training of MDE Staff on MDE's Centralized Node 2.0 Network Exchange System use and administration in accordance with Training Plans to include submission of Centralized Node 2.0 Data Exchange Network training materials.	100 business days after Milestone 3 NTP
3-6	MDE's Centralized Node 2.0 Network Exchange in Production Use for 90 Calendar Days Warranty Period.	90 calendar days after Deliverable 3-3 and 3-4 No Cost

The acceptance criteria for deliverables in Milestone 1 through 3 are defined by the TO Manager approved Statement of Work (set forth in TORFP Section 2.3) for each Milestone. In situations where the TO Manager identifies omissions in the requirements of a deliverable, the TO Manager reserves the right to determine the impact of the omission upon acceptance of that deliverable. The TO Manager's determination of the impact of the omission of requirements for a deliverable, and recommendation for addressing that omission, shall be documented in the acceptance or rejection of the deliverable. Those omissions determined as unacceptable by the TO Manager shall be resolved by TO Contractor prior to acceptance of the deliverable. However, for omissions accepted with the approval of the TO Manager for that deliverable, the TO Manager may direct the TO Contractor to resolve the omission at a later time through the change request process described in TORFP Section 2.10.

2.4.5 Performance Evaluation and Mitigation Procedures for Deliverables

2.4.5.1 **Performance Evaluation for Deliverable**

Based on the quality of deliverables detailed in Section 2.4, the TO Manager shall issue a corresponding performance rating on the Deliverable Product Acceptance Form (DPAF) provided as Attachment 9. In the event of poor or non-performance on the deliverable resulting in a rating of "unacceptable" or "partially unacceptable", full or partial payment may be withheld pending the outcome of the procedures described in Section 2.4.5.2.

2.4.5.2 **Mitigation Procedures for Poor or Non-Performance**

At any time during the TO period of performance, should the quality of deliverables detailed in Section 2.4 be rated "unacceptable" or "partially unacceptable" due to poor or non-performance as determined by the TO Manager, MDE shall pursue the following mitigation procedures prior to requesting a replacement employee:

- a) The TO Manager shall document performance issues and give written notice to the TO Contractor, clearly describing problems and delineating remediation requirement(s).
- b) The TO Contractor shall respond with a written remediation plan within three business days and implement the plan immediately upon written acceptance by the TO Manager.
- Should performance issues persist, the TO Manager may give written notice or request the immediate removal of person(s) whose performance is at issue, and determine whether a substitution is required.

2.5 REQUIRED PROJECT POLICIES, GUIDELINES AND METHODOLOGIES

The TO Contractor shall be required to comply with all applicable laws, regulations, policies, standards and guidelines affecting information technology projects, which may be created or changed periodically. The TO Contractor shall adhere to and remain abreast of current, new, and revised laws, regulations, policies, standards and guidelines affecting project execution. The following policies, guidelines, and methodologies can be found at http://doit.maryland.gov/policies/Pages/ContractPolicies.aspx under "Policies and Guidance." These include, but are not limited to:

- The State's System Development Life Cycle methodology
- The State Information Technology Security Policy and Standards
- The State Information Technology Project Oversight
- The State of Maryland Enterprise Architecture
- The TO Contractor shall follow the project management methodologies that are consistent with the Project Management Institute's Project Management Body of Knowledge Guide. TO Contractor's staff and sub Contractors are to follow a consistent methodology for all TO activities.
- The State of Maryland ADA Policies and Standards (doit.maryland.gov (search: nva))
- Compliance with the provisions of the Americans with Disability Act (ADA), ada.gov/stdspdf.htm and Web Content Accessibility Guidelines 2.0, including priority one and priority two (http://www.w3.org/TR/WCAG20).
- TO Contractor shall produce a fully documented .NET-based Node solution that, at a minimum, fully complies with the EPA Exchange Network Node 2.0 Protocol and Specifications.

 (http://www.exchangenetwork.net/node/dev_toolbox/protocol.htm)
- TO Contractor shall ensure that the version 2.0 node functional specifications will preserve functioning features in version 1.1 to assure that both version 1.1 and 2.0 are supported concurrently.
 (http://www.exchangenetwork.net/node/NodeFunctionalSpecification_v2.0.doc)
 (http://www.exchangenetwork.net/node/dev_toolbox/node_functional_spec_v1.1.pdf)
- TO Contractor shall ensure that the version Node 2.0 specification are consistent with the Network Exchange Protocol V2.0.
 (http://www.exchangenetwork.net/node/NodeFunctionalSpecification_v2.0.doc)
 (http://www.exchangenetwork.net/node/dev_toolbox/network_exchange_protocol_v1.1.pdf)
- TO Contractor shall ensure that the version Node 2.0 specification shall be consistent with the EPA Network Security Guidelines.
 - (http://www.exchangenetwork.net/node/NodeFunctionalSpecification v2.0.doc)
- TO Contractor shall ensure that the version Node 2.0 specification shall be consistent with the EPA Network Registry Guidelines and operation.
 (http://www.exchangenetwork.net/node/NodeFunctionalSpecification v2.0.doc)
- EPA's Facility Registry System (FRS) Version 3.0 of the Facility Identification Flow Implementation Guide (http://www.exchangenetwork.net/exchanges/Facility_ID_flow%20implementation.pdf) (http://www.exchangenetwork.net/exchanges/cross/facility.htm)

2.6 MDE DEPARTMENTAL RESPONSIBILITIES

The Department shall provide the following:

- **2.6.1** Executive Steering Committee: This project oversight body consists of MDE executive management, senior business managers, and senior IT representatives.
- **2.6.2** Project management to include a dedicated PM to serve as a single point of contact to the TO Contractor. Duties include:

- Coordination of plan development
- Develop, Monitor and Update Master Project Schedule
- Maintain and update the PMP document
- Manage and monitor project risks and issues
- Management of the Department's project team
- Monitor and facilitate approval of deliverables
- Authorize payment of invoices pending approval of deliverables
- Ensure TO Contractor is provided with sufficient access to both technical and business knowledge experts to maintain the project schedule
- Provide project status updates to the Executive Steering Committee
- Provide Department Change and Configuration Management documentation
- **2.6.3** Coordination of all project meetings with the TO Contractor, with applicable senior staff from OIMT and the business Programs.
- **2.6.4** MDE shall provide office space, data center rack space, provision power, and associated physical device connectivity for the following TO Contractor provided hardware configurations:
 - Production Environment
 - Disaster Recovery Environment
 - Development/Testing Environment
- **2.6.5** Performance of MDE Centralized Node 2.0 Network Exchange System data backup activities such as tape rotation and off-site storage.
- **2.6.6** MDE shall assume maintenance and operations responsibility of the MDE Centralized Node 2.0 Network Exchange at the end of the 90 Calendar Days warranty period. The TO Contractor shall continue to provide hardware and software maintenance and support as defined in Sections 2.3.3 and 2.4.3 for the duration of the TORFP TOA.
- **2.6.7** Provide network related troubleshooting with assistance from the TO Contractor as necessary and as requested with respect to the MDE Centralized Node 2.0 Network Exchange.
- **2.6.8** Assistance to vendor with mapping and understanding of MDE data
- **2.6.9** Assistance to vendor with an understanding of the One-Stop solution and needed MDE QA/QC

2.7 TO CONTRACTOR EXPERTISE REQUIRED

The TO Contractor must demonstrate experience for each of the following tasks:

2.7.1 PROJECT MANAGEMENT

The TO Contractor shall provide a dedicated Project Manager with active certification by the Project Management Institute (PMI) as a PMP to provide Project Management services in the following areas:

- Project Management Plan development.
- Project Scheduling.

- Project planning, execution, monitoring and control.
- Project tracking and oversight.
- Risk assessment and mitigation.
- Good verbal and written communication skills.
- Knowledge of IT system development and methodologies.

2.7.2 NODE 2.0 DESIGN AND IMPLEMENTATION

The TO Contractor personnel shall meet or exceed the minimum qualifications provided in Section 2.7.3, TO Contractor Personnel Minimum Qualifications, to provide Node 2.0 design and implementation services. TO Contractor personnel shall have experience in the following areas:

- Knowledge and experience with Node 2.0 design and configuration.
- Knowledge and experience with planning and designing government Node 2.0 data exchange networks.
- Knowledge and experience of Node 2.0 security and authentication best practices.
- Knowledge and experience with planning, designing, developing and implementing National and Regulated Data Flows
- Experience implementing data flows in a .NET Platform
- Experience reading, writing, generating, and converting XML
- Experience with .NET Solutions for Node versions 2.0 and 1.1 implementation
- Experience with Node 2.0 Technical Infrastructure to include
 - o Doc/Literal Encoding the binding style of Document/Literal
 - o MTOM Message Transmission and Optimization Mechanism
 - o SOAP 1.2 Most recent version of the Simple Object Access Protocol
 - o String and XML Parameters True Name/Value pair elements
 - Synchronous Status Responses in Submit and Solicit The ability for Nodes to return information about the status of a transaction immediately, without the need for an additional call to the GetStatus method
 - o Detail in Status Response Construct that is designed to allow a Node to return specific information about a status detail code, populated at the Node level
 - Email notification via 'notificationURI' Dynamic status updates through the NotificationURI parameter.
 - o Dynamic submission routing via 'recipients' Submit and Solicit methods supporting dynamic routing of EN messages through the Recipients parameter
 - o Updated Notify Method Method providing for detailed automatic Notification between Nodes to include: specific notifications for Documents, Events, and Transactions
 - Updated GetServices Method Updated to return an external schema that will fully self
 describe the services that a Node offers, and will allow Nodes to automatically interact with
 and update the ENDS registry. This will streamline data publishing and simplify point-to-point
 exchanges that are created in real-time.
 - New Execute Method Interface for expanding the Node 2.0 services in the future to include access to outside web services through the Exchange Network Protocol; and creation of an interface for legacy Node 1.1 applications that may not be Node 2.0 compliant.

2.7.3 TO CONTRACTOR PERSONNEL MINIMUM QUALIFICATIONS

The TO Contractor shall only propose staff available at the time and duration of the contract performance period. The TO Contractor shall provide personnel that satisfy the minimum personnel qualifications specified within Section 2.7.3 for each of the labor categories required to complete the deliverables for this TORFP. Labor categories not identified in Section 2.7.3, and that the TO Contractor wishes to propose for the purpose of this TORFP, the TO Contractor shall suggest the appropriate labor categories and meet the minimum qualifications as specified in the CATS II RFP Section 2.10.

Substitution of Education for Experience: A Bachelor's Degree or higher may be substituted for the general and specialized experience for those labor categories requiring a High School Diploma. A Master's Degree may be substituted for two years of the general and specialized experience for those labor categories requiring a Bachelor's Degree. Substitution shall be reviewed and approved by the State.

Substitution of Experience for Education: Substitution of experience for education may be permitted at the discretion of the State.

Personnel Minimum Qualifications

A. Project Manager

Duties: The Project Manager is assigned the management of a specific project and the work performed under assigned Task Orders. Performs day-to-day management of the project, identifies issues and risks and recommends possible issue and risk mitigation strategies associated with the project. Acts as a facilitator between a State agency and IT contractor. Is responsible for ensuring that work performed under TOs is within scope, consistent with requirements, and delivered on time and on budget. Identifies critical paths, tasks, dates, testing, and acceptance criteria. Provides solutions to improve efficiency (e.g., reduce costs while maintaining or improving performance levels). Monitors issues and provides resolutions for up-to-date status reports. Demonstrates excellent writing and oral communications skills.

Education: Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Information Systems, Business or other related discipline. Master's degree is preferred. Must possess active certification by the Project Management Institute (PMI) as a Project Manager.

General Experience: At least five (5) years of experience in project management.

Specialized Experience: At least five (3) years of experience in managing IT related projects and must demonstrate a leadership role in at least three successful projects that were delivered on time and on budget.

B. Subject Matter Expert

Duties: Defines the problems and analyzes and develops plans and requirements in the subject matter area for moderately complex-to-complex systems. Coordinates and manages the preparation of analysis, evaluations, and recommendations for proper implementation of programs and systems specifications.

Education: A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year of specialized and two years of general experience

General Experience: Must have seven (7) years of experience in the subject matter area. **Specific Experience:** At least five (5) years of combined new and related older technical experience with

EPA Data Flows and/or designing, developing, testing, and implementing Node 1.1 and/or Node 2.0 technology.

C. Database Manager

Duties: Must be capable of managing the development of database projects. Must be able to plan and budget staff and data resources. Supports application developers in planning preparation, load analysis, and backup and recovery of data. When necessary, reallocates resources to maximize benefits. Must be able to

prepare and deliver presentations on MDE's Node 2.0 concepts. Provides daily supervision and direction to support staff. Monitors performance and evaluates areas to improve efficiency.

Education: A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience. **General Experience:** Must have seven (7) years of experience in the development and maintenance of database systems.

Specialized Experience: At least five (5) years of experience with database management systems, system design and analysis, operating systems software, and internal and data manipulation languages.

D. Applications Programmer

Duties: Analyzes functional business applications and design specifications for functional areas such as accounting, personnel, manpower, logistics, Node 2.0 design and configuration, implementing EPA data flows and contracts. Develops block diagrams and logic flowcharts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers as required to ensure program deadlines are met.

Education: A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience. General Experience: Must have five (5) years of computer experience in information systems design. Specialized Experience: At least three (3) years of experience as an application programmer working on the planning, design, development, testing and implementing Node 2.0 for State and Local government environmental agencies. Experience shall include implementing EPA data flows in a .NET Platform, experience reading, writing, generating and converting XML files and the ability to develop complex software to satisfy design objectives.

E. Training Specialist/Instructor

Duties: Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. **Education:** A Bachelor's Degree from an accredited college or university with a major in Education/Training in the areas of Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: Must have 4 years of experience in information systems development, training, or related fields.

Specialized Experience: At least 2 years of experience in developing and providing IT and end user training on computer hardware and application software.

F. Systems Engineer

Duties: Must be capable of analyzing information requirements. Evaluates system problems of workflow, organization, and planning. Develops appropriate corrective action.

Education: A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: Must have three (3) years of experience in systems engineering. **Specialized Experience:** At least one (1) year of experience in analytical problem solving of workflow, organization and planning.

G. Senior Systems Analyst

Duties: Serves as a computer systems expert on assignments that typically involve establishing automated systems, where concern is with overall life cycle structure; and conducts feasibility studies from design, implementation and post-implementation evaluation from a number of possible approaches. Design criteria must be established to accommodate changes in legislation, mission, or functional program requirements. **Education:** Bachelor's Degree from an accredited college or university in Computer Science, Systems Analysis, Information Systems or a related field. A Master's Degree in a related field of information technology is preferred.

General Experience: A minimum of eight (8) years of experience in information technology systems analysis.

Specialized Experience: At least five (5) years of the experience in the design of business applications on complex IT systems. Requires a broad knowledge of data sources, data flow, system interactions, advanced computer equipment and software applications, and advanced systems design techniques to develop solutions to unyielding complex problems and to advise officials on systems design and IT forecasts.

H. Systems Administrator

Duties: Monitor and coordinate all data system operations, including security procedures, and liaison with end users. Ensure that necessary system backups are performed and storage and rotation of backups is accomplished. Monitor and maintain records of system performance and capacity to arrange vendor services or other actions for reconfiguration and anticipate requirements for system expansion. Assist managers to monitor and comply with State data security requirements. Coordinate software development, user training, network management and minor installation and repair of equipment.

Education: An Associate's degree from an accredited college or university in Computer Science, Information Systems, Business or other related technical discipline. A Bachelor's Degree in one of the above disciplines equals one-year specialized and two years general experience. An additional year of specialized experience may be substituted for the required education.

General Experience: Two years experience in a computer-related field.

Specialized Experience: One year experience administering multi-user, shared processor systems and data communications networks.

I. Senior Computer Security Systems Specialist

Duties: Analyzes and defines security requirements for Multilevel Security (MLS) issues. Designs, develops, engineers, and implements solutions to MLS requirements. Responsible for the implementation and development of the MLS. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in the MLS arena. Performs risk analyses, which also include risk assessment. Provides daily supervision and direction to staff.

Education: A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: This position requires a minimum of eight (8) years of experience in analysis and definition of security requirements.

Specialized Experience: At least five (5) years of specialized experience in defining computer security requirements for high-level applications, evaluation of approved security product capabilities, and developing solutions to MLS problems.

J. Technical Writer/Editor

Duties: Assists in collecting and organizing information for preparation of user manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Conducts research and ensures the use of proper technical terminology. Translates technical information into clear, readable documents to be used by technical and non-technical personnel. For applications built to run in a Windows environment, uses the standard help compiler to prepare all on-line documentation. Assists in performing financial and administrative functions. Must demonstrate the ability to work independently or under only general direction.

Education: Associate's Degree in related field. A Bachelor's degree is preferred.

General Experience: A minimum of five (5) years of experience in this area.

Specialized Experience: At least two (2) years of experience in preparing and editing documents,

including technical documents. Also includes researching for applicable standards.

K. Network Manager

Duties: Performs a variety of network management functions in support of MIS services related to the operation, performance, or availability of data communications networks. Modifies command language programs, network start up files, assigns/re-assigns network device logical, analyzes network performance and recommends adjustments to wide variety of complex network management functions with responsibility for overall performance and availability of networks. LAN/WAN consultant skilled in network analysis, integration and tuning. Experience with cable/LAN meters, protocol analyzers, Simple Network Management Protocol (SNMP) and Remote Monitoring (RMON) based software products. Knowledge of Ethernet, FDDI and high speed WANs, routers, bridges, and switches. Analyze client LANs/WANs, isolate source of problems, and recommend reconfiguration and implementation of new network hardware to increase performance. Working knowledge of network operating systems. Conducts load balancing efforts to achieve optimum device utilization and network performance. Manages network Email functions. Establishes mailboxes and monitors mail performance on the network. Coordinates with communications engineering to resolve hardware problems. Works with customer and operations staff in scheduling preventative and emergency maintenance activities.

Education and Other Requirements: A Bachelor's degree from an accredited college or university with a major in Computer Science, Information Technology, Engineering, or a related discipline. If applicable, shall be certified as network engineer for the specific network operating system as defined in this TORFP. The certification criteria are determined by the network operating system vendor. An additional year of specialized experience may be substituted for the required education.

General Experience: Twelve years experience in a computer-related field.

Specialized Experience: Ten years experience in one or more of the following areas: data communications engineering, data communications hardware or software analysis, network administration or management, or have data communication equipment installation and maintenance. Knowledge of cable including FDDI, FOIRL, and 10Base T. Particularly desirable is experience working with IBM's SNA with knowledge of the MVS operating system and SNA protocols.

L. Network Administrator

Duties: Performs a variety of network management functions related to the operation, performance or availability of data communications networks. Experience with cable/LAN meters, protocol analyzers, SNMF' and RMON based software products. Knowledge of Ethernet, FDDI and high speed WANs and routers. Analyze client LANs/WANs, isolate source of problems, and recommend reconfiguration and implementation of new network hardware to increase performance. Advanced knowledge of network operating systems. Modifies command language programs, network start up files, assigns/reassigns network device logicals, participates in load balancing efforts throughout the network to achieve optimum device utilization and performance. Establishes new user accounts on the network granting access to required network files and programs. Manages network Email functions. Establishes mailboxes and

monitors mail performance on the network. Troubleshoots network/user problems, presents resolutions for implementation. Prepares a variety of network resource reports.

Education and other Requirements: An Associate's degree from an accredited college or university in Computer Science, Information Systems, Engineering or a related field, or two years of college or university study in Computer Science, Information Systems, Engineering or a related field. If applicable, should be certified as a network administrator for a specific network operating system as defined in the State task request. Certification criteria is determined by the network operating system vendor. An additional year of specialized experience may be substituted for the required education.

General Experience: Two years experience in a computer-related field.

Specialized Experience: One year of experience in one or more of the following areas: data communications engineering, data communications hardware or software analysis, network administration or management, data communications equipment installation and maintenance, or computer systems administration and management.

2.7.4 NODE 2.0 AND DATA FLOW MAINTENANCE AND SUPPORT

The TO Contractor staff shall demonstrate expertise in the following areas:

- Knowledge and experience providing Node 2.0 and Data Flow maintenance and support services for State, Local or Government Entities is preferred.
- Knowledge and experience developing EPA Data Flows.
- Knowledge and experience implementing data flows in a .NET Platform
- Experience reading, writing, generating, and converting XML
- Experience with .NET Solutions for Node versions 2.0 and 1.1 implementation
- Knowledge and experience securing and authenticating Inbound Communications with the Node 2.0.
- Knowledge and experience with the following Software is desired:
 - ❖ Microsoft SQL Server 2005 database skills
 - ❖ Microsoft Access 97, Microsoft Access 2000, Microsoft Access 2003
 - ❖ Visual Fox Pro 5.0
 - ❖ Visual Fox Pro 9.0
 - Visual Studio 2005/2008
 - ❖ .NET Framework 2008
 - ❖ XMLSPY 2009 Enterprise Edition
 - * XML
 - .NET programming

2.8 RETAINAGE

Ten percent (10%) of each invoice for Milestones 1 through 4 deliverables shall be held by MDE as retainage. The TO Contractor shall invoice for the total retainage no earlier than ninety days (90) after acceptance of all Project Milestones 1 through 4.

If the TO Contractor fails to meet the requirements as defined in the Contract, the TO Contractor shall rectify the performance problem or complete the specification to the satisfaction of the TO Manager within thirty (30) days or as directed by the TO Project Manager, at no cost to the MDE, as described in the Contract. If the TO Manager is not satisfied within this timeframe, the TO Contractor forfeits the full retainage.

The TO Contractor shall submit a separate invoice for the retainage release. The TO Contractor shall track any cumulative retainage amount and display this amount on the invoices, until the retainage is released by the TO Manager.

2.9 INVOICING

Payment will only be made upon completion and acceptance of the milestones as defined in Attachment 1, Attachment 1A and Attachment 1B.

Invoice payments to the TO Contractor shall be governed by the terms and conditions defined in the CATS II Master Contract. Invoices for payment shall contain the TO Contractor's Federal Tax Identification Number, as well as the information described below, and must be submitted to the TO Manager for payment approval. Payment of invoices will be withheld if a signed Deliverable Product Acceptance Form (DPAF)- Attachment 9, is not submitted.

The TO Contractor shall submit invoices for payment upon acceptance of separately priced deliverables, on or before the 15th day of the month following receipt of the approved notice(s) of acceptance from the TO Manager. A copy of the notice(s) of acceptance shall accompany all invoices submitted for payment.

2.9.1 INVOICE SUBMISSION PROCEDURE

This procedure consists of the following requirements and steps:

- A. The invoice shall identify MDE OIMT as the TO Requesting Agency, deliverable description, associated TOA number, date of invoice, period of performance covered by the invoice, and a TO Contractor point of contact with telephone number.
- B. The TO Contractor shall send the original of each invoice and supporting documentation (itemized billing reference for employees and any subcontractor and signed Deliverable Product Acceptance Form (DPAF)- Attachment 9, for each deliverable being invoiced) submitted for payment to the MDE at the following address:

Wayne Petrush, Director, Project Management Office of Information Management and Technology Maryland Department of the Environment Montgomery Park Business Center 1800 Washington Blvd. Baltimore, MD 21230

C. Invoices for final payment shall be clearly marked as "FINAL" and submitted when all work requirements have been completed and no further charges are to be incurred under the TOA. In no event shall any invoice be submitted later than 60 calendar days from the TOA termination date.

2.10 REPORTING

The TO Contractor and the TO Requesting Agency shall conduct weekly progress meetings. A weekly project progress report shall be submitted by the TO Contractor at least 2 days in advance of the meeting to the TO Manager and shall contain, at a minimum, the following information:

- A. TO Requesting Agency name, TOA number, functional area name and number, reporting period and "Progress Report" to be included in the e-mail subject line.
- B. Work accomplished during the weekly period.
- C. Deliverable progress, as a percentage of completion.
- D. Problem areas, including risks, schedule discussions and updates, scope creep or deviation from the work plan.
- E. Planned activities for the next reporting period including risks, schedule discussions and updates.
- F. Gantt chart updated from the original to show actual progress; as applicable, explanations for variances and plan for completion on schedule.
- G. An accounting report for the current reporting period and a cumulative summary of the totals for both the current and previous reporting periods. The accounting report shall include amounts invoiced-to-date and paid-to-date.
- H. Prepare and submit weekly or as needed updates on project artifacts to include: Project Management Plan, Project Schedule and other project artifacts to reflect changes to scope, schedule, personnel, and costs.
- I. Monthly reporting of MBE participation is required in accordance with the terms and conditions of the CATS Master Contract by the 15th day of each month. The TO Contractor shall provide a completed MBE Participation form (Attachment 2, Form D-5) to MDE OIMT at the same time the invoice copy is sent. The TO Contractor shall ensure that each MBE Subcontractor provides a completed MBE Participation Form (Attachment 2, Form D-6). Subcontractor reporting shall be sent directly from the subcontractor to MDE OIMT. MDE OIMT will monitor both the TO Contractor's efforts to achieve the MBE participation goal and compliance with reporting requirements. The TO Contractor shall email all completed forms, copies of invoices and checks paid to the MBE directly to the TO Procurement Officer and TO Manager.

2.11 CHANGE REQUEST REQUIREMENTS

2.11.1 State's Unilateral Right

Pursuant to § 13-218 of the State Finance and Procurement Article of the Annotated Code of Maryland, the State has the unilateral right to order, in writing, changes to the work within the scope of the Contract.

2.11.2 Allowed Changes

The TO Contractor shall submit Change Requests (CRs) to request any changes to the Scope of Work (as required by TORFP Section 2.3, Base Contract Amount (TORFP Attachment A), or baseline project schedule. The TO Contractor shall only propose project schedule changes that adjust the durations of individual Milestones, but shall not propose to alter the deadlines established in TORFP Table 1 - MDE Deliverable Schedule MDE Deliverable Schedule unless approved by the TO Manager.

2.11.3 Change Request Process

The TO Contractor shall submit all CRs in writing to the TO Manager. The CR shall include the impact to the Requirements Document, total Base Contract Amount, and baseline project schedule. All CRs require the written approval of the TO Manager. The TO Manager will provide the final disposition of the CR in writing to the TO Contractor.

2.11.4 Change Request Invoices

The TO Contractor shall invoice MDE for work performed on any approved CR with the invoice for that Milestone upon acceptance of the Milestone by the TO Manager.

2.12 CHANGE ORDERS

If the TO Contractor is required to perform additional work, or there is a work reduction due to unforeseen scope changes, the TO Contractor and TO Manager shall negotiate a mutually acceptable price modification based on the TO Contractor's proposed rates in the Master Contract and scope of the work change. No scope of work modifications shall be performed until a change order is executed by the TO Procurement Officer and approved by the Department of Information Technology.

SECTION 3 -TASK ORDER PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS

3.1 REQUIRED RESPONSE

Each Master Contractor receiving this CATS II TORFP must respond within the submission time designated in the Key Information Summary Sheet. Each Master Contractor is required to submit one or two possible responses: 1) a proposal; or 2) a completed Master Contractor Feedback Form. The feedback form helps the State understand for future contract development why Master Contractors did not submit proposals. The form is accessible via the CATS II Master Contractor login screen and clicking on TORFP Feedback Response Form from the menu.

3.2 FORMAT

If a Master Contractor elects to submit a TO Proposal, the Master Contractor shall do so in conformance with the requirements of this CATS II TORFP. A TO Proposal shall provide the following sections in order:

3.2.1 THE TECHNICAL PORTION OF THE TO PROPOSAL SHALL INCLUDE

- A. Proposed Services Work Plan
 - 1) Requirements: A detailed discussion of the Master Contractor's understanding of the work and the Master Contractor's capabilities, approach and solution to address the requirements outlined in Section 2.
 - 2) Assumptions: A description of any assumptions formed by the Master Contractor in developing the Technical Proposal.
 - 3) *Risk Assessment:* An assessment of any risks inherent in the work requirements and actions to mitigate these risks.
 - 4) *Proposed Solution:* A description of the Master Contractor's proposed solution to accomplish the specified work requirements. At a minimum, the Master Contractor shall address the following items in the proposed solution.
 - a) Describe the process for defining and developing the new MDE Centralized Node 2.0 Network Exchange System implementation plan.
 - b) Describe the process for defining and developing the Data Flow Design strategy plan
 - c) Describe the process for designing the new Node 2.0 that will be used for the user interface with the One Stop Application, the Node 2.0 QA/QC checks, the Node 2.0 response to inbound requests and the functions that relate to each data flow.
 - d) Describe the process for defining and developing the Node 2.0 Security Configuration and Authentication plan.
 - e) Describe the recommended Node 2.0 and associated infrastructure hardware/software. Section 2.3.2 represents the minimal amount of information that should be provided by TO Contractor to describe the proposed Node 2.0 solution features and functionality.
 - f) Describe the training curriculum and training required by MDE OIMT Staff to administer the MDE Centralized Node 2.0 Network Exchange. Please be specific in terms of staff skill requirements and level of effort in terms of staff time requirements in participating in the training sessions.

- g) Describe the QA/QC reports and validation processes that will be used, documented and provided to MDE OIMT to demonstrate and validate that the system is configured properly and performs as described by the TO Contractor.
- h) Describe and define the Node 2.0 implementation approach. The TO Contractor shall provide up to 3 examples where this approach was successfully executed.
- i) Describe the Node 2.0 migration process that will be used to transfer existing data flows to the new Node 2.0. Please describe any actions or modifications that MDE OIMT staff will be required to make with respect to the management and maintenance existing process during the migration. Describe the impact this will have (if any) on MDE OIMT or Business Program Staff workload.
- 5) *Proposed Tools:* A description of all proposed tools that will be used to facilitate the work requirements of this TORFP.
- 6) *Tasks and Deliverables:* A description of and the schedule for each task and deliverable, illustrated by a Gantt chart. Start and completion dates for each task, milestone, and deliverable shall be indicated. The Gantt chart will form the baseline for task order monitoring, and will be updated weekly as part of progress reporting (see Section 2.10).
- 7) Work Breakdown Structure: A detailed WBS and staffing schedule, with labor hours by skill category that will be applied to meet each milestone and deliverable as listed in Section 2-Scope of Work to accomplish all specified work requirements of this TORFP. Include all State labor category resource requirements and labor hours required by TO Contractor.
- 8) Acceptance Criteria: A statement acknowledging the Master Contractor's understanding of the acceptance criteria.

Proposed Personnel

- 1) Identify and provide resumes for all proposed personnel by labor category. The resume should highlight the proposed personnel's applicable responsibilities and accomplishments as they relate to the requirements of this TORFP.
- 2) Certification that all proposed personnel meet the minimum required qualifications and possess the required certifications in accordance to Section 2.7.3.
- 3) Provide the names and titles of all key management personnel who will be involved with supervising the services rendered under this TOA.
- 4) Complete and provide, at the interview, Attachment 5 Labor Classification Personnel Resume Summary.

MBE Participation

1) Submit completed MBE documents Attachment 2 - Forms D-1 and D-2.

Subcontractors

1) Identify all proposed subcontractors, including MBEs, and their full roles in the performance of Section2- Scope of Work of this TORFP.

Master Contractor and Subcontractor Experience and Capabilities

1) Experience of the TO Contractor: Provide three (3) examples of completed projects that were similar in scope to the one defined in Section2- Scope of Work of this TORFP. Each of the examples must include a reference, to be provided at the interview, complete with the following:

- a) Name of organization.
- b) Name, title, and telephone number of point-of-contact for the reference.
- c) Type and duration of the contract(s) supporting the reference.
- d) The services provided, scope of the contract and performance objectives satisfied as they relate to the Scope of Work of this TORFP.
- e) Term of the project, whether the Master Contractor is still providing these services and, if not, an explanation of why it is no longer providing the services to the client organization.
- 2) State of Maryland Experience: If applicable, the Master Contractor shall submit a list of all contracts it currently holds or has held within the past five (5) years with any government entity of the State of Maryland. For each identified contract, the Master Contractor shall provide:
 - a) The State contracting entity.
 - b) A brief description of the services/goods provided.
 - c) The dollar value of the contract.
 - d) The term of the contract.
 - e) Whether the contract was terminated prior to the specified original contract termination date.
 - f) Whether any available renewal option was not exercised.
 - g) The State employee contact person to include name, title, telephone number and e-mail address.

This information will be considered as part of the experience and past performance evaluation criteria for this TORFP.

Note- State of Maryland experience can be included as part of Section E2 above as project or contract experience. State of Maryland experience is neither required nor given more weight in proposal evaluations. Noted. Thx.

Proposed Facility

1) Identify Master Contractor's facilities, including address, from which any work will be performed.

State Assistance

1) Provide an estimate of expectation concerning participation by State personnel.

Confidentiality

1) A Master Contractor should give specific attention to the identification of those portions of its proposal that it considers confidential, proprietary commercial information or trade secrets, and provide justification why such materials, upon request, should not be disclosed by the State under the Public Information Act, Title 10, Subtitle 6, of the State Government Article of the Annotated Code of Maryland. Contractors are advised that, upon request for this information from a third party, the TO Procurement Officer will be required to make an independent determination regarding whether the information may be disclosed.

3.2.2 THE FINANCIAL RESPONSE OF THE TO PROPOSAL SHALL INCLUDE

A. A description of any assumptions on which the Master Contractor's Financial Proposal is based

(Assumptions shall not constitute conditions, contingencies, or exceptions to the price proposal);

- B. Attachment 1 Completed Financial Proposal:
 - i. Milestone and Deliverable identifying information will be in bold and placed in a frame.
 - ii. The prices offered shall be firm fixed prices for the entire term of the Contract. Fixed-price dollar figures will be rounded to the nearest whole dollar.
- iii. The information should continue, as necessary and appropriate, to cover all Milestones and Deliverables.
- iv. List all deliverables, even those not separately priced (NSP).
- v. The Master Contractor should indicate on Attachment 1B the appropriate Labor Category being proposed, and the Fixed Hourly Labor Category Rate. Proposed rates are not to exceed the rates defined in the Consulting and Technical Services II (CATS II) Master Contract.
- C. The Offeror's proposed price shall be fully loaded and expressly include overhead expenses (e.g., fringe benefits, administrative costs, profits, etc.), and all related and incidental expenses (e.g., travel, legal services) associated with providing all goods and services and equipment required by this TORFP. No other amounts or costs will be paid to the Contractor. Specifically, no taxes or assessments or license fees or permits of any type will be paid in addition to the price(s) proposed on the Price Proposal.
- D. The Offeror's "Total Evaluated Cost" specified on the Price Proposal-Attachment 1B is based on an estimated quantity for the number of hours to be utilized for Task 4 Optional Services: MDE Centralized Node 2.0 Exchange Network Maintenance and Enhancements and will be used solely for price evaluation, comparison and selection for recommendation for award. The quantity indicated is not a guarantee of any minimum or maximum amount and may change at any time during the term of the Task Order.
- E. There is no guarantee of any minimum or maximum amounts under Task 4 Optional Services: Centralized Node 2.0 Exchange Network Maintenance and Enhancements. The actual amount to be paid to the TO Contractor shall be calculated using the Firm Fixed Unit Price (Hourly Rate) specified on the Price Proposal and the number of hours actually required by the MDE and provided by the TO Contractor.

SECTION 4 - PROCEDURE FOR AWARDING A TASK ORDER AGREEMENT

4.1 EVALUATION CRITERIA

The TO Contractor will be selected from among all eligible Master Contractors within the appropriate functional area responding to the CATS II TORFP. In making the TOA award determination, the TO Requesting Agency will consider all information submitted in accordance with Section 3.

4.2 TECHNICAL CRITERIA

The following are technical criteria for evaluating a TO Proposal in descending order of importance. The TO Contractor's proposals will be evaluated basis of the following:

- A. Overall understanding of the work required, quality of the approach, and proposed solution.
- B. Past performance on similar projects as provided in the Contractor's Technical Proposal.
- C. Experience with implementing Node 2.0 Network Exchange Systems using .NET comparable to the requirements herein, specifically with other State, Local, or Federal Government Entities.
- D. Required time involvement of MDE staff resources in implementing the requirements of this TORFP.
- E. The qualifications and experience of the proposed personnel.
- F. Whether the proposed schedule is realistic and attainable and includes, but is not limited to, the milestones and deliverables listed in this TORFP.
- G. Task 4 Optional Services: Node 2.0 Maintenance and Enhancements will be evaluated on the basis of the following:
 - 1) Overall understanding of the work required
 - 2) Past performance on similar projects as provided in the Contractor's Technical Proposal.
 - 3) The qualifications and experience of the proposed personnel

4.3 SELECTION PROCEDURES

- A. TO Proposals deemed technically qualified will have their financial proposal considered. All others will receive e-mail notice from the TO Procurement Officer of not being selected to perform the work.
- B. Qualified TO Proposal financial responses will be reviewed and ranked from lowest to highest price proposed.
- C. The State reserves the right to require from the TO Contractor an oral presentation to the evaluation committee or any other State designated personnel. The TO Contractor will receive a minimum of three (3) calendar days notice prior to the presentation. The State reserves the right to request any key personnel proposed by the Contractor to attend the oral presentation.
- D. The State reserves the right to require from the TO Contractor a demonstration of the proposed solution for the Node 2.0 Network Exchange System to the evaluation committee or any other State designated personnel. The Contractor will receive a minimum of five (5) business days notice prior to the demonstration. The State reserves the right to request any key personnel proposed by the TO Contractor to attend the demonstration.
- E. The most advantageous TO Proposal offer considering technical and financial submission shall be

selected for the work assignment. In making this selection, a task order agreement shall be awarded to the Contractor whose proposal is most advantageous to the State, considering price and the technical evaluation factors set forth herein. In making this determination, technical merit will receive greater weight than price.

4.4 COMMENCEMENT OF WORK UNDER A TO AGREEMENT

Commencement of work in response to a TOA shall be initiated only upon issuance of a fully executed TO Agreement, Purchase Order and by a Notice to Proceed authorized by the TO Procurement Officer. See Attachment 7 - Notice to Proceed (sample).

ATTACHMENT 1

SUMMARY PRICE PROPOSAL FOR CATS II TORFP

P.O. # U00P2400009

Item Number	Milestone	Line Item Cost
2.3.1	Milestone 1: Project Initiation (Total Milestone 1 Cost from Attachment 1A)	
2.3.2	Milestone 2: Centralized Node 2.0 Network Exchange System Implementation Plan (Total Milestone 2 Cost from Attachment 1A)	
2.3.3	Milestone 3: MDE Centralized Node 2.0 Network Exchange System Implementation (Total Milestone 3 Cost from Attachment 1A)	
2.3.4	Optional Services: MDE Centralized Node 2.0 Network Exchange Maintenance and Support (Total Evaluated Price from Attachment 1B)	
	TOTAL EVALUATED COST:	

Authorized Individual Name	Company Name
Title	Company Tax ID #

Submit as a .pdf file with the Financial Response

ATTACHMENT 1A

PRICE PROPOSAL (FIXED PRICE) FOR CATS II TORFP

P.O. # U00P2400009

Item Number	Milestone	Deliverable	Item Description	Fixed Price Cost
2.3.1	Milestone 1: Project Initiation	Deliverable 1-1	Final Project Management Plan	
		Deliverable 1-2	Final Project Schedule	
		Deliverable 1-3	Kick-off Meeting	
			Total Milestone 1 Cost:	
2.3.2	Milestone 2: Centralized Node 2.0 Network Exchange System Implementation Plan	Deliverable 2-1	Final Systems and Functional Requirements Document	
		Deliverable 2-2	Final Data Flow Design Document	
		Deliverable 2-3	Final Data Cleanup and QA/QC Plan	
		Deliverable 2-4	Final Integration Testing Plan	
		Deliverable 2-5	Final Node 2.0 Security Configuration and Authentication Plan	
		Deliverable 2-6	Final Performance and Acceptance Plan	
		Deliverable 2-7	Final Hardware/Software Configuration Plan	
		Deliverable 2-8	Final Administrator and User Training Plan	
		Deliverable 2-9	Statement Granting State Ownership	

			Total Milestone 2 Cost:	
2.3.3	Milestone 3: MDE Centralized Node 2.0 Network Exchange System Implementation	Deliverable 3-1	Final Documentation for the MDE Centralized Node 2.0 Network Exchange System Hardware and Software System Installation and Configuration, Technical and Security Specifications, and Operational, Maintenance, and Support Requirements.	
		Deliverable 3-2 (Hardware)	To Contractor Purchase of Node 2.0 Hardware/Hardware Maintenance (MDE reserves the option to purchase hardware through other contract vehicles)	
		Deliverable 3-2 (Software)	TO Contractor Purchase of Node 2.0 Software/Licenses/Software Maintenance (MDE reserves the option to purchase software through other contract vehicles)	
		Deliverable 3-3	Implementation of MDE's Centralized Node 2.0 Network Exchange System in accordance with the Final MDE Centralized Node 2.0 Network Exchange Implementation Plan.	
		Deliverable 3-4	Completion of the MDE Centralized Node 2.0 Network Exchange performance and acceptance validation testing and reporting.	
		Deliverable 3-5	Complete training of MDE Staff on the Centralized Node 2.0 Network Exchange use and administration in accordance with approved Training Plans to include submission of Centralized Node 2.0 Network Exchange training materials.	
		Deliverable 3-6	Executed MDE Centralized Node 2.0 Network Exchange in Production Use for 90 Calendar Day Warranty Period.	No Charge
			Total Milestone 3 Cost:	
			TOTAL COST MILESTONES 1-3:	

Authorized Individual Name	Company Name
Title	Company Toy ID #
Submit as a .pdf file with the	Company Tax ID # Financial Response

ATTACHMENT 1B

PRICE PROPOSAL (TIME AND MATERIALS) FOR CATS II TORFP

P.O. # U00P2400009

	A	В	C
Labor Categories	Hourly	Total Class	Evaluated Task
	Labor Rate	Hours	Cost
(Master Contractor to insert Proposed CATS II labor categories			
for this TORFP for Base Year 1)			
2.3.4 Optional Services: MDE Centralized Node 2.0 Network Exchange Maintenance and Support Services			
Task Category #1 – MDE Centralized Node 2.0 Network Exchange System Support			
Insert Proposed Labor Category #1	\$		
Insert Proposed Labor Category #2	\$		
etc.	\$		
Totals for Task Category #1 – Base Year 1:		480	(TO Contractor shall insert Total Evaluated Cost here)
Total Evaluated Cost for Base Year 1:			
(Master Contractor to insert Proposed CATS II labor categories for this TORFP for Optional Year 1)			
2.3.4 Optional Services: MDE Centralized Node 2.0 Network Exchange Maintenance and Support Services			
Task Category #1 – MDE Centralized Node 2.0 Network Exchange System Support			
Insert Proposed Labor Category #1	\$		
Insert Proposed Labor Category #2	\$		
etc.	\$		
Totals for Task Category #1 – Optional Year 1:		480	(TO Contractor shall insert Total Evaluated Cost here)
Total Evaluated Cost for Optional Year 1:			

4 .1				
Auth	orized	l Indi	vidiial	l Name
\neg uuu		ши	viuuai	i i vaiiic

Company Name

Title

Company Tax ID #

The Hourly Labor Rate is the actual rate the State will pay for services and must be recorded in dollars and cents. The Hourly Labor Rate cannot exceed the Master Contract Rate, but may be lower. Rates must be fully loaded, i.e., include all direct and indirect costs and profit for the Master Contractor to perform under the TOA.

SUBMIT AS A .PDF FILE WITH THE FINANCIAL RESPONSE

TO CONTRACTOR MINORITY BUSINESS ENTERPRISE REPORTING REQUIREMENTS

CATS II TORFP # U00P2400009

These instructions are meant to accompany the customized reporting forms sent to you by the TO Manager. If, after reading these instructions, you have additional questions or need further clarification, please contact the TO Manager immediately.

- 1. As the TO Contractor, you have entered into a TO Agreement with the State of Maryland. As such, your company/firm is responsible for successful completion of all deliverables under the contract, including your commitment to making a good faith effort to meet the MBE participation goal(s) established for TORFP. Part of that effort, as outlined in the TORFP, includes submission of monthly reports to the State regarding the previous month's MBE payment activity. Reporting forms D-5 (TO Contractor Paid/Unpaid MBE Invoice Report) and D-6 (Subcontractor Paid/Unpaid MBE Invoice Report) are attached for your use and convenience.
- 2. The TO Contractor must complete a separate Form D-5 for each MBE subcontractor for each month of the contract and submit one copy to each of the locations indicated at the bottom of the form. The report is due no later than the 15th of the month following the month that is being reported. For example, the report for January's activity is due no later than the 15th of February. With the approval of the TO Manager, the report may be submitted electronically. Note: Reports are required to be submitted each month, regardless of whether there was any MBE payment activity for the reporting month.
- 3. The TO Contractor is responsible for ensuring that each subcontractor receives a copy (e-copy of and/or hard copy) of Form D-6. The TO Contractor should make sure that the subcontractor receives all the information necessary to complete the form properly, i.e., all of the information located in the upper right corner of the form. It may be wise to customize Form D-6 (upper right corner of the form) for the subcontractor the same as the Form D-5 was customized by the TO Manager for the benefit of the TO Contractor. This will help to minimize any confusion for those who receive and review the reports.
- 4. It is the responsibility of the TO Contractor to make sure that all subcontractors submit reports no later than the 15th of each month, regardless of whether there was any MBE payment activity for the reporting month. Actual payment data is verified and entered into the State's financial management tracking system from the subcontractor's D-6 report only. Therefore, if the subcontractor(s) do not submit their D-6 payment reports, the TO Contractor cannot and will not be given credit for subcontractor payments, regardless of the TO Contractor's proper submission of Form D-5. The TO Manager will contact the TO Contractor if reports are not received each month from either the prime Contractor or any of the identified subcontractors. The TO Contractor must promptly notify the TO Manager if, during the course of the contract, a new MBE subcontractor is utilized. Failure to comply with the MBE contract provisions and reporting requirements may result in sanctions, as provided by COMAR 21.11.03.13.

FORM D – 1

CERTIFIED MBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT

This document shall be included with the submittal of the Offeror's TO Proposal. If the Offeror fails to submit this form with the TO Proposal, the TO Procurement Officer shall determine that the Offeror's TO Proposal is not reasonably susceptible of being selected for award.

In conjunction with the offer submitted in response to TORFP No. U00P2400009, I affirm the following:

1.	I acknowledge the overall certified Minority Business Enterprise (MBE) participation goal of percent and if specified in the TORFP, sub-goals of percent for MBEs classified as African American-owned and
	percent for MBEs classified as women-owned. I have made a good faith effort to achieve this goal.
OR	
	After having made a good faith effort to achieve the MBE participation goal, I conclude that I am unable to achieve it. Instead, I intend to achieve an MBE goal ofpercent and request a waiver of the remainder of the goal. If I am selected as the apparent TO Agreement awardee, I will submit written waiver documentation that complies with COMAR 21.11.03.11 within 10 business days of receiving notification that our firm is the apparent low bidder or the apparent awardee.
2.	I have identified the specific commitment of certified Minority Business Enterprises by completing and

- 2. I have identified the specific commitment of certified Minority Business Enterprises by completing and submitting an MBE Participation Schedule (Attachment 2 Form D-2) with the proposal.
- 3. I acknowledge that the MBE subcontractors/suppliers listed in the MBE Participation Schedule will be used to accomplish the percentage of MBE participation that I intend to achieve.
- 4. I understand that if I am notified that I am the apparent TO Agreement awardee, I must submit the following documentation within 10 working days of receiving notice of the potential award or from the date of conditional award (per COMAR 21.11.03.10), whichever is earlier.
 - (a) Outreach Efforts Compliance Statement (Attachment D-3)
 - (b) Subcontractor Project Participation Statement (Attachment D-4)
 - (c) <u>MBE Waiver Documentation</u> per COMAR 21.11.03.11 (if applicable)
 - (d) Any other documentation required by the TO Procurement Officer to ascertain offeror's responsibility in connection with the certified MBE participation goal.

If I am the apparent TO Agreement awardee, I acknowledge that if I fail to return each completed document within the required time, the TO Procurement Officer may determine that I am not responsible and therefore not eligible for TO Agreement award. If the TO Agreement has already been awarded, the award is voidable.

5. In the solicitation of subcontract quotations or offers, MBE subcontractors were provided not less than the same information and amount of time to respond as were non-MBE subcontractors.

information, and belief.	ry that the contents of this paper are true to the best of my knowledge
Offeror Name	Signature of Affiant
Address	Printed Name, Title
Date	

FORM D – 2

MINORITY BUSINESS ENTERPRISE PARTICIPATION SCHEDULE

This document shall be included with the submittal of the TO Proposal. If the Offeror fails to submit this form with the TO Proposal, the TO Procurement Officer shall determine that the TO Proposal is not reasonably susceptible of being selected for award.

TO Prime Contractor (Firm Name, Address, Phone)	Task Order Description
10 Time contractor (Tim Name, Address, Thone)	Task Order Description
Task Order Agreement Number U00P2400009	
C	
List Information For Each Certified MBE Subcontractor	or On This Project
Minority Firm Name	MBE Certification Number
•	
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Williofity I filli Name	MDE Certification Number
Work To Be Performed/SIC	
WOLK TO BE FELLOTHIEU/SIC	
Percentage of Total Contract	
refeelitage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	

USE ATTACHMENT D-2 CONTINUATION PAGE AS NEEDED

SUMMARY

TOTAL MBE PARTICIPATION:	<u> %</u>
TOTAL WOMAN-OWNED MBE PARTICIPATION:	<u>%</u>
TOTAL AFRICAN AMERICAN-OWNED MBE PARTICIPATION:	%

FORM D – 2

MINORITY BUSINESS ENTERPRISE PARTICIPATION SCHEDULE (CONTINUED)

List Information For Each Certified MBE Sub	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	
Minority Firm Name	MBE Certification Number
Work To Be Performed/SIC	
Percentage of Total Contract	

OUTREACH EFFORTS COMPLIANCE STATEMENT

In conjunction with the bid or offer submitted in response to TORFP # U00P2400009, I state the following:

111 (solijanetion with the old of other submitted in response to Fold I in cool 2 10000, I state the following.			
1	Offeror identified opportunities to subcontract in these specific work categories:			
2	Attached to this form are copies of written solicitations (with bidding instructions) used to solicit certified MBEs for these subcontract opportunities.			
3	Offeror made the following attempts to contact personally the solicited MBEs:			
4	☐ Offeror assisted MBEs to fulfill or to seek waiver of bonding requirements. (DESCRIBE EFFORTS)			
	☐ This project does not involve bonding requirements.			
5	 □ Offeror did/did not attend the pre-proposal conference □ No pre-proposal conference was held. 			
Of	By: Name Name			
Ad	dress Title			
	Date			

Submit within 10 working days of receiving notice of the potential award

FORM D – 4

SUBCONTRACTOR PROJECT PARTICIPATION STATEMENT

SUBMIT ONE FORM FOR EACH CERTIFIED MBE LISTED IN THE MBE PARTICIPATION SCHEDULE

Provided that	is awarded the TO Agreement in		
(Prime TO Contractor	Name)		
conjunction with TORFP No. U00P240	00009, it and,		
	(Subcontractor Name)		
MDOT Certification No. , int	tend to enter into a contract by which the subcontractor shall:		
(Describe work to be performed by MB	BE):		
□ No bonds are r	equired of Subcontractor		
	amount and type of bonds are required of Subcontractor:		
	and the sypt of contact are required of Successful action.		
By:	By:		
Prime Contractor Signature	Subcontractor Signature		
Name	Name		
Title	Title		
Date	Date		
SUBMIT WITHIN 10 WORK	ING DAYS OF RECEIVING NOTICE OF THE POTENTIAL AWARD		

FORM D-5

MINORITY BUSINESS ENTERPRISE PARTICIPATION TO CONTRACTOR PAID/UNPAID INVOICE REPORT

Report #: Reporting Period (Month/Year): Report is due by the 15 th of the following month.		Contracting U Contract Amo MBE Sub Co Contract Beg Contract End	P # U00P2400009 Unit unt ntract Amt in Date Date vided	
Prime TO Contractor:			Contact Person:	
Address:				
City:			State:	ZIP:
Phone:	FAX:			
Cult contractor None			Contact Doncon	
Subcontractor Name:			Contact Person:	
Phone:	FAX:			
Subcontractor Services Provided:				
List all unpaid invoices over 30 days old re	ceived fr	om the MBE s	subcontractor named above	2:
1.				
2.				
3.				
Total Dollars Unpaid: \$				
**If more than one MBE subcontractor is used for this contract, please use separate forms. Return one copy of this form to the following address:				
Wayne Petrush, TO Manager Maryland Department of the Environment	William Kamberger, To Procurement Manager Maryland Department of the Environment			
1800 Washington Boulevard	1800 Washington Boulevard			
Baltimore, MD 21230	Baltimore, MD 21230			
wpetrush@mde.state.md.us	<u>bka</u>	amberger@md	e.state.md.us	
Signature: SUBMIT AS REQUIRE			_ Date: MBE REPORTING REQUIREME	

FORM D – 6

MINORITY BUSINESS ENTERPRISE PARTICIPATION SUBCONTRACTOR PAID/UNPAID INVOICE REPORT

Report #:	CATS TORFP # U00P2400009					
Paparting Period (Month/Vegr): / Contracti		ting Unit				
Reporting Period (Month/Year):/ Contract Amount MBE Sub Contract Amt		ı act Amt				
Report Due By the 15 th of the following	Contrac	t Begin I	Date			
Month.	Contrac	t End Da	te			
	Service	s Provide	d			
MBE Subcontractor Name:						
MDOT Certification #:						
Contact Person:						
Address:			1			
City:			State:		ZIP:	
Phone:		FAX:	AX:			
Subcontractor Services Provided:						
List all payments received from Prime TO Contractor during reporting period indicated above.			List dates and amounts of any unpaid invoices over 30 days old.			
1.		1.				
2.		2.				
3.		3.				
Total Dollars Paid: \$		Total Dollars Unpaid: \$				
Prime TO Contractor: Contact Person:						
Return one copy of this form to the following address:						
Wayne Petrush, TO Manager	William Kamberger, To Procurement Manager					
Maryland Department of the Environment						
1800 Washington Boulevard	1800 Washington Boulevard					
Baltimore, MD 21230 wpetrush@mde.state.md.us	Baltimore, MD 21230 bkamberger@mde.state.md.us					
Signature:			Date:			

SUBMIT AS REQUIRED IN TO CONTRACTOR MBE REPORTING REQUIREMENTS

ATTACHMENT 3 – TASK ORDER AGREEMENT

CATS II TORFP# U00P2400009 OF MASTER CONTRACT #060B9800035

This Task Order Agreement ("TO Agreement") is made this day of Month, 2011 by and between Task Order Contractor (TO Contractor) and the STATE OF MARYLAND, TO Requesting Agency.

IN CONSIDERATION of the mutual premises and the covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

- 1. Definitions. In this TO Agreement, the following words have the meanings indicated:
 - a. "Agency" means the Maryland Department of the Environment, as identified in the CATS II TORFP # U00P2400009.
 - b. "CATS II TORFP" means the Task Order Request for Proposals # U00P2400009, dated MONTH DAY, YEAR, including any addenda.
 - c. "Master Contract" means the CATS II Master Contract between the Maryland Department of Information Technology. and TO Contractor dated
 - d. "TO Procurement Officer" means TO Procurement Officer. The Agency may change the TO Procurement Officer at any time by written notice to the TO Contractor.
 - e. "TO Agreement" means this signed TO Agreement between the Maryland Department of the Environment and TO Contractor.
 - f. "TO Contractor" means the CATS II Master Contractor awarded this TO Agreement, whose principal business address is
 - g. "TO Manager" means Wayne Petrush of the Agency. The Agency may change the TO Manager at any time by written notice to the TO Contractor.
 - h. "TO Proposal Technical" means the TO Contractor's technical response to the CATS II TORFP dated date of TO Proposal Technical.
 - i. "TO Proposal Financial" means the TO Contractor's financial response to the CATS II TORFP dated date of TO Proposal Financial.
 - i. "TO Proposal" collectively refers to the TO Proposal Technical and TO Proposal Financial.

2. Scope of Work

- 2.1. This TO Agreement incorporates all of the terms and conditions of the Master Contract and shall not in any way amend, conflict with or supersede the Master Contract.
- 2.2. The TO Contractor shall, in full satisfaction of the specific requirements of this TO Agreement, provide the services set forth in Section 2 of the CATS II TORFP. These services shall be provided in accordance with the Master Contract, this TO Agreement, and the following Exhibits, which are attached and incorporated herein by reference. If there is any conflict among the Master Contract, this TO Agreement, and these Exhibits, the terms of the Master Contract shall govern. If there is any conflict between this TO Agreement and any of these Exhibits, the following order of precedence shall determine the prevailing provision:
 - a. The TO Agreement,
 - b. Exhibit A CATS II TORFP

- c. Exhibit B TO Proposal-Technical
- d. Exhibit C TO Proposal-Financial
- 2.3. The TO Procurement Officer may, at any time, by written order, make changes in the work within the general scope of the TO Agreement. No other order, statement or conduct of the TO Procurement Officer or any other person shall be treated as a change or entitle the TO Contractor to an equitable adjustment under this Section. Except as otherwise provided in this TO Agreement, if any change under this Section causes an increase or decrease in the TO Contractor's cost of, or the time required for, the performance of any part of the work, whether or not changed by the order, an equitable adjustment in the TO Agreement price shall be made and the TO Agreement modified in writing accordingly. The TO Contractor must assert in writing its right to an adjustment under this Section within thirty (30) days of receipt of written change order and shall include a written statement setting forth the nature and cost of such claim. No claim by the TO Contractor shall be allowed if asserted after final payment under this TO Agreement. Failure to agree to an adjustment under this Section shall be a dispute under the Disputes clause of the Master Contract. Nothing in this Section shall excuse the TO Contractor from proceeding with the TO Agreement as changed.

3. Time for Performance

Unless terminated earlier as provided in the Master Contract, the TO Contractor shall provide the services described in the TO Proposal and in accordance with the CATS II TORFP on receipt of a Notice to Proceed from the TO Manager. The term of this TO Agreement is for a period of insert time for performance, commencing on the date of Notice to Proceed and terminating on Month Day, Year.

4. Consideration and Payment

- 4.1. The consideration to be paid the TO Contractor shall be done so in accordance with the CATS II TORFP and shall not exceed \$total amount of task order. Any work performed by the TO Contractor in excess of the not-to-exceed ceiling amount of the TO Agreement without the prior written approval of the TO Manager is at the TO Contractor's risk of non-payment.
- 4.2. Payments to the TO Contractor shall be made as outlined Section 2 of the CATS II TORFP, but no later than thirty (30) days after the Agency's receipt of an invoice for services provided by the TO Contractor, acceptance by the Agency of services provided by the TO Contractor, and pursuant to the conditions outlined in Section 4 of this Agreement.
- 4.3. Each invoice for services rendered must include the TO Contractor's Federal Tax Identification Number which is Federal ID number. Charges for late payment of invoices other than as prescribed by Title 15, Subtitle 1, of the State Finance and Procurement Article, Annotated Code of Maryland, as from time-to-time amended, are prohibited. Invoices must be submitted to the Agency TO Manager unless otherwise specified herein.
- 4.4. In addition to any other available remedies, if, in the opinion of the TO Procurement Officer, the TO Contractor fails to perform in a satisfactory and timely manner, the TO Procurement Officer may refuse or limit approval of any invoice for payment, and may cause payments to the TO Contractor to be reduced or withheld until such time as the TO Contractor meets performance standards as established by the TO Procurement Officer.

IN WITNESS THEREOF, the parties have executed this TO Agreement as of the date hereinabove set forth.

TO Contractor Name	
By: Type or Print TO Contractor POC	Date
Witness:	
STATE OF MARYLAND, Maryland Department of the	e Environment
By: Dinesh Gandi, TO Procurement Officer	Date
Witness:	

ATTACHMENT 4 – CONFLICT OF INTEREST AFFIDAVIT AND DISCLOSURE

- A) "Conflict of interest" means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the State, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.
- B) "Person" has the meaning stated in COMAR 21.01.02.01B(64) and includes a bidder, Offeror, Contractor, consultant, or subcontractor or sub consultant at any tier, and also includes an employee or agent of any of them if the employee or agent has or will have the authority to control or supervise all or a portion of the work for which a bid or offer is made.
- C) The bidder or Offeror warrants that, except as disclosed in §D, below, there are no relevant facts or circumstances now giving rise or which could, in the future, give rise to a conflict of interest.
- D) The following facts or circumstances give rise or could in the future give rise to a conflict of interest (explain in detail—attach additional sheets if necessary):
- E) The bidder or Offeror agrees that if an actual or potential conflict of interest arises after the date of this affidavit, the bidder or Offeror shall immediately make a full disclosure in writing to the procurement officer of all relevant facts and circumstances. This disclosure shall include a description of actions which the bidder or Offeror has taken and proposes to take to avoid, mitigate, or neutralize the actual or potential conflict of interest. If the contract has been awarded and performance of the contract has begun, the Contractor shall continue performance until notified by the procurement officer of any contrary action to be taken.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date:	By:	
	(Authorized Representa	ative and Affiant)

ATTACHMENT 5 – LABOR CLASSIFICATION PERSONNEL RESUME SUMMARY

INSTRUCTIONS:

- 1. Master Contractors must comply with all personnel requirements under the Master Contract RFP 060B9800035.
- 2. Only labor categories proposed in the Master Contractors Financial Proposal may be proposed under the CATS II TORFP process.
- 3. For each person proposed in any of the labor categories, complete one Labor Category Personnel Resume Summary to document how the proposed person meets each of the minimum requirements. This summary is required at the time of the interview.
- 4. For example: If you propose John Smith, who is your subcontractor, and you believe he meets the requirements of the Group Facilitator, you will complete the top section of the form by entering John Smith's name and the subcontractor's company name. You will then complete the right side of the Group Facilitator form documenting how the individual meets each of the requirements. Where there is a time requirement such as three months experience, you must provide the dates from and to showing an amount of time that equals or exceeds mandatory time requirement; in this case, three months.
- 5. Each form also includes examples of duties to perform. The proposed person must be able to fulfill those duties.
- 6. For each subject matter expert, the State will identify the particular area of expertise and the Master Contractor shall provide proof the individual has qualifications within that area of expertise.
- 7. Additional information may be attached to each Labor Category Personnel Resume Summary that may assist a full and complete understanding of the individual being proposed.

ATTACHMENT 5 – LABOR CLASSIFICATION PERSONNEL RESUME SUMMARY (CONTINUED)

Proposed Individual's Name/Company:	How does the proposed individual meet each			
	requirement?			
I ABOR CLASSIFICATION TITLE	E – (INSERT LABOR CATEGORY NAME)			
Education:	E - (INSERT LABOR CATEGORT NAME)			
(Insert the education description from the CATS II R	FP			
from Section 2.10 for the applicable labor category.)				
Experience:				
(Insert the experience description from the CATS II F	RFP			
from Section 2.10 for the applicable labor category.)				
Duties:				
(Insert the duties description from the CATS II RFP f	rom			
Section 2.10 for the applicable labor category.)				
The information provided on this form for this labor of	class is true and correct to the best of my knowledge:			
Contractor's Contract Administrator:				
Signature	Date			
Proposed Individual:				
•				
Signature	Date			
SUBMIT WITH TECHNICAL PROPOSAL				
SIGNATURE REQUIRED AT THE TIME OF THE INTERVIEW				
SIGNITURE REQUIRED	Of THE HALLIE H			

Maryland Department of the Environment – OIMT

NODE 2.0 TORFP # U00P2400009

ATTACHMENT 6 – DIRECTIONS TO THE PRE-TO PROPOSAL CONFERENCE

Driving directions to:

MDE Headquarters

1800 Washington Blvd.

Baltimore, MD 21230

From points north of Baltimore

Take I-95 South
Go through the Fort McHenry Tunnel
Exit at Exit 53 (I-395)
Bear to the right and follow signs to Martin Luther King Boulevard
Move into the left lane as the roadway descends from the overpass
At the first traffic light, make a left onto Washington Boulevard
Follow Washington Boulevard for approximately one mile
Cross over Monroe Street.
Make a right into the first parking lot entrance (Red Lot)

At the gate press the intercom button and tell the guard that you are visiting MDE for a Pre-Bid Conference

Enter the lobby and proceed to the first floor reception area

From points south of Baltimore

Take I-95 North

Exit at Exit 51 (Washington Boulevard).

At the bottom of the exit ramp, make a left onto Washington Boulevard.

Proceed approximately one half mile and cross over railroad tracks

Turn left into the parking lot entrance just past the railroad tracks (Red Lot)

At the gate press the intercom button and tell the guard that you are visiting MDE for a Pre-Bid Conference

Enter the lobby and proceed to the first floor reception area

ATTACHMENT 7 – NOTICE TO PROCEED

Month Day, Year
TO Contractor Name
TO Contractor Mailing Address
Re: CATS II Task Order Agreement # U00P2400009
Dear TO Contractor Contact:
This letter is your official Notice to Proceed as of Month Day, Year, for the above-referenced Task Order Agreement. Wayne Petrush of the Maryland Department of the Environment will serve as your contact person on this Task Order. Wayne Petrush can be reached at 410-537-3099 and wpetrush@mde.state.md.us.
Enclosed is an original, fully executed Task Order Agreement and purchase order.
Sincerely,
TO Procurement Officer
Task Order Procurement Officer
Enclosures (2)
cc: Wayne Petrush
Procurement Liaison Office, Department of Information Technology
Project Management Office, Department of Information Technology

ATTACHMENT 8 – AGENCY RECEIPT OF DELIVERABLE FORM

acknowledge receipt of the following:		
TORFP Title: MDE Centralized Node 2.0 Netv	work Exchange System	
TO Agreement Number: # U00P2400009		
Title of Deliverable:		_
TORFP Reference Section #		
Deliverable Reference ID #		
Name of TO Manager: Wayne Petrush		
TO Manager Signature	Date Signed	
Name of TO Contractor's Project Manager:		
TO Contractor's Project Manager Signature	Date Signed	

SUBMIT AS REQUIRED IN SECTION 2.3 OF THE TORFP.

ATTACHMENT 9 - DELIVERABLE PRODUCT ACCEPTANCE FORM (DPAF)

The product identified below has been delivered by <i>company name</i> . If acceptable, please sign this form and return to <i>company name</i> (Attention: <i>TO Contractor PM</i>). Should the product not be acceptable, please provide details in the space provided below and return the form unsigned to the <i>company name</i> Project Manager (ATTN: <i>To Contractor PM</i>) within 7 days of the delivery date listed below.				
AGENCY NAME:	MARYLAND DEPARTMENT OF THE ENVIRONMENT			
PROJECT NAME:	Name of Project			
CONTRACT NUMBER:	U00P2400009			
PRODUCT DELIVERED:	Deliverable x-x			
DELIVERABLE PRICE:	\$xx,xxx.xx			
Company Name PM:	FirsNamet LastName			
DELIVERY DATE:	Month DD, 2011			
DAPF DUE DATE:	Month DD, 2011			
ACCEPTANCE SIGNATURE:				
MDE Program Manager	Date			
Comments:				
ISSUED BY	ISSUED BY THE TO MANAGER AS REQUIRED IN SECTION 2.3 OF THE TORFP Manuford Department of the Environment OIMT NODE 2.0 TORER # L100P2400000 Page 75 of 04			

Dear Wayne:

ATTACHMENT 10 – NON-DISCLOSURE AGREEMENT (OFFEROR)

This	Non-	Disclosure Agreement (herei						by and between reinafter referred to
as "the	e State				- ,		, (-	
the M	DE C sary fo		vork Exchange S OFFEROR with information proving the contraction of th	System. In ore the access to ce wided by the St	der for the C rtain confide tate shall be c	DFFEROR to sometical informations considered	submit a TO on including nfidential Inf	Proposal, it will be, but not limited, to formation regardless
oral, v	writter condit	format, or media upon v, electronic, or any other ion for its receipt and accollows:	form, and regard	dless of whether	er the inform	ation is marke	d as "Confide	ential Information".
1		FEROR will not copy, described the reconstruction r						
2	co _l	ch employee or agent of to by of this Agreement and ployee or agent of the Quirements and liabilities s	the OFFEROR OFFEROR who	shall provide signs this A	originals of greement sha	such executed all be subject	Agreements	to the State. Each
3	rec	FEROR shall return the ommended award. If tho ormation to TO Procurem	e OFFEROR do	oes not submi	t a Proposal,	the OFFERO	OR shall retu	rn the Confidential
4	4. OFFEROR acknowledges that the disclosure of the Confidential Information may cause irreparable harm to the State and agrees that the State may obtain an injunction to prevent the disclosure, copying, or other impermissible use of the Confidential Information. The State's rights and remedies hereunder are cumulative and the State expressly reserve any and all rights, remedies, claims and actions that it may have now or in the future to protect the Confidential Information and/or to seek damages for the OFFEROR'S failure to comply with the requirements of this Agreement The OFFEROR consents to personal jurisdiction in the Maryland State Courts.					rmissible use of the expressly reserves et the Confidential		
5	5. In the event the State suffers any losses, damages, liabilities, expenses, or costs (including, by way of example only attorneys' fees and disbursements) that are attributable, in whole or in part to any failure by the OFFEROR or any employee or agent of the OFFEROR to comply with the requirements of this Agreement, OFFEROR and such employees and agents of OFFEROR shall hold harmless and indemnify the State from and against any such losses damages, liabilities, expenses, and/or costs.							
6	. Th	is Agreement shall be gov	erned by the lav	vs of the State	of Maryland.			
7	An ma coi	FEROR acknowledges the notated Code of Marylan terial fact in connection we exist to a fine of the acknowledges that the	d, a person may with a procurement of not more than	not willfully ent contract. Posts \$20,000 and/o	make a false ersons makin or imprisonm	or fraudulent g such stateme ent not exceed	statement or ents are guilty ling 5 years o	representation of a y of a felony and on or both. OFFEROR
8	and	e individual signing below l conditions specified in the ler Section 2 of this Agreement in	this Agreement. reement, such i	If signed bel ndividual ackr	low by an in- nowledges th	dividual empl	oyee or agen	t of the OFFEROR
OFFE	ROR:			BY:				
NAM	E:			TITLE:				
ADDI	RESS.							

SUBMIT AS REQUIRED IN SECTION 1.7 OF THE TORFP

ATTACHMENT 11 – NON-DISCLOSURE AGREEMENT (TO CONTRACTOR)

THIS NON-DISCLOSURE AGREEMENT ("Agreement") is made as of this day of, 2011, by and between the State of Maryland ("the State"), acting by and through its Maryland Department of the Environment (the "Department"), and ("TO Contractor"), a corporation with its principal business office located at and its principal office in Maryland located at
RECITALS
WHEREAS, the TO Contractor has been awarded a Task Order Agreement (the "TO Agreement") for MDE Centralized Node 2.0 Network Exchange System TORFP No. U00P2400009 dated release date for TORFP, (the "TORFP) issued under the Consulting and Technical Services procurement issued by the Department, Project Number 060B9800035; and
WHEREAS , in order for the TO Contractor to perform the work required under the TO Agreement, it will be necessary for the State to provide the TO Contractor and the TO Contractor's employees and agents (collectively the "TO Contractor's Personnel") with access to certain confidential information regarding (the

NOW, THEREFORE, in consideration of being given access to the Confidential Information in connection with the TORFP and the TO Agreement, and for other good and valuable consideration, the receipt and sufficiency of which the parties acknowledge, the parties do hereby agree as follows:

- Confidential Information means any and all information provided by or made available by the State to the TO
 Contractor in connection with the TO Agreement, regardless of the form, format, or media on or in which the
 Confidential Information is provided and regardless of whether any such Confidential Information is marked as such.
 Confidential Information includes, by way of example only, information that the TO Contractor views, takes notes
 from, copies (if the State agrees in writing to permit copying), possesses or is otherwise provided access to and use of
 by the State in relation to the TO Agreement.
- 2. TO Contractor shall not, without the State's prior written consent, copy, disclose, publish, release, transfer, disseminate, use, or allow access for any purpose or in any form, any Confidential Information provided by the State except for the sole and exclusive purpose of performing under the TO Agreement. TO Contractor shall limit access to the Confidential Information to the TO Contractor's Personnel who have a demonstrable need to know such Confidential Information in order to perform under the TO Agreement and who have agreed in writing to be bound by the disclosure and use limitations pertaining to the Confidential Information. The names of the TO Contractor's Personnel are attached hereto and made a part hereof as Exhibit A. Each individual whose name appears on Exhibit A shall execute a copy of this Agreement and thereby be subject to the terms and conditions of this Agreement to the same extent as the TO Contractor. TO Contractor shall update Exhibit A by adding additional names as needed, from time to time.
- 3. If the TO Contractor intends to disseminate any portion of the Confidential Information to non-employee agents who are assisting in the TO Contractor's performance of the TORFP or who will otherwise have a role in performing any aspect of the TORFP, the TO Contractor shall first obtain the written consent of the State to any such dissemination. The State may grant, deny, or condition any such consent, as it may deem appropriate in its sole and absolute subjective discretion.
- 4. TO Contractor hereby agrees to hold the Confidential Information in trust and in strictest confidence, to adopt or establish operating procedures and physical security measures, and to take all other measures necessary to protect the Confidential Information from inadvertent release or disclosure to unauthorized third parties and to prevent all or any portion of the Confidential Information from falling into the public domain or into the possession of persons not bound to maintain the confidentiality of the Confidential Information.
- 5. TO Contractor shall promptly advise the State in writing if it learns of any unauthorized use, misappropriation, or disclosure of the Confidential Information by any of the TO Contractor's Personnel or the TO Contractor's former Personnel. TO Contractor shall, at its own expense, cooperate with the State in seeking injunctive or other equitable relief against any such person(s).

"Confidential Information").

- 6. TO Contractor shall, at its own expense, return to the Department, all copies of the Confidential Information in its care, custody, control or possession upon request of the Department or on termination of the TO Agreement.
- 7. A breach of this Agreement by the TO Contractor or by the TO Contractor's Personnel shall constitute a breach of the TO Agreement between the TO Contractor and the State.
- 8. TO Contractor acknowledges that any failure by the TO Contractor or the TO Contractor's Personnel to abide by the terms and conditions of use of the Confidential Information may cause irreparable harm to the State and that monetary damages may be inadequate to compensate the State for such breach. Accordingly, the TO Contractor agrees that the State may obtain an injunction to prevent the disclosure, copying or improper use of the Confidential Information. The TO Contractor consents to personal jurisdiction in the Maryland State Courts. The State's rights and remedies hereunder are cumulative and the State expressly reserves any and all rights, remedies, claims and actions that it may have now or in the future to protect the Confidential Information and/or to seek damages from the TO Contractor and the TO Contractor's Personnel for a failure to comply with the requirements of this Agreement. In the event the State suffers any losses, damages, liabilities, expenses, or costs (including, by way of example only, attorneys' fees and disbursements) that are attributable, in whole or in part to any failure by the TO Contractor or any of the TO Contractor's Personnel to comply with the requirements of this Agreement, the TO Contractor shall hold harmless and indemnify the State from and against any such losses, damages, liabilities, expenses, and/or costs.
- 9. TO Contractor and each of the TO Contractor's Personnel who receive or have access to any Confidential Information shall execute a copy of an agreement substantially similar to this Agreement and the TO Contractor shall provide originals of such executed Agreements to the State.
- 10. The parties further agree that:
 - a. This Agreement shall be governed by the laws of the State of Maryland;
 - b. The rights and obligations of the TO Contractor under this Agreement may not be assigned or delegated, by operation of law or otherwise, without the prior written consent of the State;
 - c. The State makes no representations or warranties as to the accuracy or completeness of any Confidential Information;
 - d. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement;
 - e. Signatures exchanged by facsimile are effective for all purposes hereunder to the same extent as original signatures; and
 - f. The Recitals are not merely prefatory but are an integral part hereof.

SUBMIT AS REQUIRED IN SECTION 1.7 OF THE TORFP

ATTACHMENT 12 – TO CONTRACTOR SELF-REPORTING CHECKLIST

The purpose of this checklist is for CATS II Master Contractors to self-report on adherence to procedures for task orders (TO) awarded under the CATS II master contract. Requirements for TO management can be found in the CATS II master contract RFP and at the TORFP level. The Master Contractor is requested to complete and return this form by the **Checklist Due Date** below. Master Contractors may attach supporting documentation as needed. Please send the completed checklist and direct any related questions to contractoversight@doit.state.md.us with the TO number in the subject line.

Master Contractor:			
Master Contractor Contact / Phone:			
Procuring State Agency Name:			
TO Title:			
TO Number:			
TO Type (Fixed Price, T&M, or Both):			
Checklist Issue Date:			
Checklist Due Date:			
Section 1 – Task Order	rs with Invoices Linked to Deliverables		
A) Was the original TORFP (Task Order Request for Proposals) structured to link invoice payments to distinct deliverables with specific acceptance criteria?			
Yes No (If no, skip to Section 2.)			
B) Do TO invoices match corresponding deliverable prices shown in the accepted Financial Proposal? Yes No (If no, explain why)			
C) Is the deliverable acceptance process being adhered to as defined in the TORFP?			
Yes No (If no, explain why)			
Section 2 – Task Orders with Invoices Linked to Time, Labor Rates and Materials			
A) If the TO involves material costs, are material costs passed to the agency without markup by the Master Contractor?			
Yes No (If no, explain why)			
B) Are labor rates the same or less than the rates proposed in the accepted Financial Proposal?			
Yes No (If no, explain why)			
C) Is the Master Contractor providing timesheets or other appropriate documentation to support invoices?			
Yes No (If no, explain why)			

Section 3 – Substitution of Personnel				
A) Has there been any substitution of personnel?				
Yes No (If no, skip to Section 4.)				
B) Did the Master Contractor request each personnel substitution in writing?				
Yes No (If no, explain why)				
C) Does each accepted substitution possess equivalent or better education, experience and qualifications than incumbent personnel?				
Yes No (If no, explain why)				
D) Was the substitute approved by the agency in writing?				
Yes No (If no, explain why)				
Section 4 – MBE Participation				
A) What is the MBE goal as a percentage of the TO value? (If there is no MBE goal, skip to Section 5)				
%				
B) Are MBE reports D-5 and D-6 submitted monthly?				
Yes No (If no, explain why)				
C) What is the actual MBE percentage to date? (divide the dollar amount paid to date to the MBE by the total amount paid to date on the TO) %				
(Example - \$3,000 was paid to date to the MBE sub-contractor; \$10,000 was paid to date on the TO; the MBE percentage is 30% (3,000 \div 10,000 = 0.30))				
D) Is this consistent with the planned MBE percentage at this stage of the project? Yes No (If no, explain why)				
E) Has the Master Contractor expressed difficulty with meeting the MBE goal? Yes No				
(If yes, explain the circumstances and any planned corrective actions)				
Section 5 – TO Change Management				
A) Is there a written change management procedure applicable to this TO?				
Yes No (If no, explain why)				
B) Does the change management procedure include the following?				
Yes No Sections for change description, justification, and sign-off				
Yes No Sections for impact on cost, scope, schedule, risk and quality (i.e., the impact of change on satisfying TO requirements)				
Yes No A formal group charged with reviewing / approving / declining changes (e.g., change control board, steering committee, or management team)				

C) Have any change orders been executed?
Yes No No
(If yes, explain expected or actual impact on TO cost, scope, schedule, risk and quality)
D) Is the change management procedure being followed?
Yes No (If no, explain why)

ATTACHMENT 13 – LIVING WAGE AFFIDAVIT OF AGREEMENT

Contract No	
Name of Contractor	
Address	
	State Zip Code
If the Contract is E	exempt from the Living Wage Law
	eing an authorized representative of the above named Contractor, hereby affirms that the from Maryland's Living Wage Law for the following reasons: (check all that apply)
Bidder/0	Offeror is a nonprofit organization
Bidder/0	Offeror is a public service company
Bidder/0	Offeror employs 10 or fewer employees and the proposed contract value is less than \$500,000
Bidder/0	Offeror employs more than 10 employees and the proposed contract value is less than \$100,000
If the Contract is a	Living Wage Contract
commitment to com required, to submit a contract. The Bidder wage rate in effect a Subcontractors who subject to the living ensure its Subcontra subsequent renewal Industry, automatica	I, being an authorized representative of the above named Contractor, hereby affirms our ply with Title 18, State Finance and Procurement Article, Annotated Code of Maryland and, if all payroll reports to the Commissioner of Labor and Industry with regard to the above stated Cofferor agrees to pay covered employees who are subject to living wage at least the living the time service is provided for hours spent on State contract activities, and to ensure that its are not exempt also pay the required living wage rate to their covered employees who are wage for hours spent on a State contract for services. The Contractor agrees to comply with, and ctors comply with, the rate requirements during the initial term of the contract and all periods, including any increases in the wage rate established by the Commissioner of Labor and ally upon the effective date of the revised wage rate.
Bthe following reason	(initial here if applicable) The Bidder/Offeror affirms it has no covered employees for is (check all that apply):
All emp time during	loyee(s) proposed to work on the State contract will spend less than one-half of the employee's gevery work week on the State contract;
	loyee(s) proposed to work on the State contract will be 17 years of age or younger during the the State contract; or
All emp	loyee(s) proposed to work on the State contract will work less than 13 consecutive weeks on the act.
	of Labor and Industry reserves the right to request payroll records and other data that the as sufficient to confirm these affirmations at any time.
Name of Authorized	Representative:
Signature of Author	ized Representative:
	Title:
Witness Name (Typ	ed or Printed): z Date:

ATTACHMENT 14 -High Level System and Functional Requirements Document

1.0 General Contractor Requirements

- 1.1 TO Contractor shall gather detailed system requirements.
- 1.2 TO Contractor shall allow MDE to review the system functionality during the development phase.
- 1.3 TO Contractor shall specify and obtain approval from MDE for the purchase of approved hardware, software, licenses, and hardware and software maintenance.
 - 1.3.1 MDE reserves the right to procure these items through other procurement vehicles.
- 1.4 TO Contractor shall ensure that there is no interruption of workflow during the project.

2.0 Personnel Requirements

- 2.1 TO Contractor shall specify and provide key personnel that cannot be removed from this project without the prior approval of MDE.
 - 2.1.1 Key personnel shall meet the labor requirements specified in the TO Contractor's CATS II Master Agreement.
- 2.2 The Project Manager selected by the TO Contractor shall:
 - 2.2.1 Possess active certification from the Project Management Institute (PMI)
 - 2.2.2 Utilize industry-standard project management tools and techniques to plan, execute, monitor, control and close the project.
 - 2.2.3 Adhere to the principles and guidelines provided in Maryland's SDLC methodology.

3.0 General System Requirements

- 3.1 All data and source code shall be submitted and belong to MDE.
- 3.2 TO Contractor shall specify Hewlett Packard hardware that is compatible with MDE's current technical environment and meets the standards set forth in Section 4.0 of the High Level System and Functional Requirements Document.
- 3.3 To assure maximum stability in the MDE Centralized Node 2.0 Network Exchange Production environment, as well as to ensure continued development and testing beyond the implementation of the Node 2.0, the TO Contractor shall establish a Development/Test environment that is a mirror image of the Production environment, where new dataflow exchanges or Node enhancements can be developed and tested prior to deployment to Production.
- 3.4 The MDE Centralized Node 2.0 Network Exchange shall be fully integrated into MDE's infrastructure to include the MDE One-Stop Application.
- 3.5 The MDE Centralized Node 2.0 Network Exchange shall provide for a web-based Node Administration application that includes the following features:
 - Support for direct administration of user accounts for the Network Authentication and Authorization Service (NAAS) as well as for local non-NAAS accounts. The utility should allow an administrator to create and delete these accounts and assign permissions on a flow-byflow basis.
 - Support for remote Node administration.
 - Scheduling capabilities for transactions such as submits, solicits, and solicit response processing.
 - Ability to allow authenticated Node users to run flows on other Nodes for which they have permissions.

- Support for backend staging databases including Oracle and SQL.
- Ability to communicate directly with the Exchange Network Discovery Service (ENDS) 2.0 web services to allow the Node to automatically update the ENDS registry of Nodes and services. A draft copy of the Get Services XML schema is posted on the Exchange Network website at http://www.exchangenetwork.net/schema/ENDS/2/GetServices-v1 draft 3.xsd.
- Support for multi-step processing (e.g., submit to CDX, wait, download results report when ready, email to internal staff).
- Support for automatic XML validation against locally held schemas, EPA held schemas, or the EPA Schematron.
- Tools to allow MDE OIMT staff to easily configure and implement Exchange Network and other data flows.
- 3.6 TO Contractor shall ensure that when a database query is executed, the network node returns a ResultSetType, which contains the result set and paging information. This shall include the following file content types:
 - rowld: This is an integer for the first record contained in the result set sent to the requestor. This value must not be less than -1 and must not be more than the total number of rows in the result set minus one (n-1). The rowld of the first record of a complete result set is always 0. If a result set with no results is returned, the rowld must be set to 0.
 - rowCount: This is the number of records returned in the result set. This value must be set to 0 if no records are returned.
 - lastSet: This is a Boolean value indicating if the data is the last result set. A value of *true* indicates no more data is available given the current parameters, and *false* means that more data is available. If the service provider supports positioned fetches, a consumer can retrieve the next result set by calling the Query method with a new rowId equal to the last rowId of the last results set plus the value of rowCount.
 - results: This is a generic XML container that may hold any XML document, either compressed or uncompressed.
- 3.7 TO Contractor shall ensure that when a request is issued, the Network Node processes the request and returns status information to the requester. The response shall include a transaction Id to uniquely identify the transaction across all network nodes. The Centralized Node 2.0 Network Exchange System shall return the following transaction status codes:
 - Received: The transaction was received by the service.
 - Processing: The transaction is currently being processed.
 - Pending: Processing of the documents has not begun, but is scheduled.
 - Approved: The submission has been approved or certified if it needs approval. However, the documents have not been delivered to the receiver yet.
 - Processed: The request/submission has been processed.
 - Completed: The transaction has completed, no further action will be taken on the request/submission.
 - Failed: The transaction has failed, no further action will be taken on the request/submission. The requester should resubmit.
 - Canceled: The transaction has been cancelled by the originator of the request.
 - Unknown: The status of the transaction cannot be determined.
 - statusDetail: A string describes the current status. This value should provide additional detail useful to the user as to the particular nature of the status code.
- 3.8 TO Contractor shall ensure that the MDE Node 2.0 Network Exchange System uses the EPA Exchange Network Node Specification version 2.0 parameters for data services and other web services to include:
 - 3.8.1 ParameterType an extension of xsd:string with the following attributes:
 - Name: The name of the parameter.

- Type: The simple XML schema type of the parameter. It must be a qualified name such as xsd:string. (This attribute is optional and a parameter must be a string if Encoding is not specified or the value of Type is *None*).
- Encoding: The encoding type of the parameter. See the following Table 1 for encoding types. (This attribute is optional. If not specified, the parameter is assumed to be an un-encoded string).

Table 1 - Parameter Encoding Types

Encoding Type	Description	
Base64	base64 Binary encoded content.	
ZIP	A base64 encoded string representing ZIP compressed content.	
Encrypt	Content encrypted using triple-des algorithm. This is used for sending sensitive parameter such as passwords or social security numbers.	
Digest	The content is a base64 encoded hash value of the parameter.	
XML	XML structured contents. i.e., the parameter is an XML string.	
None	No encoding.	

- 3.9 TO Contractor shall ensure that the EPA Exchange Network guidelines for Parameter Binding and Parameter Semantics are adhered to.
- 3.10 The MDE Centralized Node 2.0 Network Exchange System shall be able to track the following information for each transaction:
 - Transaction ID
 - Method Name
 - Request Name
 - Dataflow
 - Parameters
 - User Name
 - Client IP
 - Recipients
 - Timestamp
 - Status
 - Error Message
- 3.11 The MDE Centralized Node 2.0 Network Exchange System shall have the ability to track each document handled internally. The following minimum information should be stored for each document:
 - Transaction ID
 - Document ID
 - Document Name
 - Document Type
 - Content Type
 - Status
 - Timestamp

- 3.12 TO Contractor shall ensure that the MDE Centralized Node 2.0 Network Exchange System utilizes Notification Method to allow the Node 2.0 to receive document notifications, transaction notifications and event notifications. It should be structured with the following elements:
 - MessageType: A notification type of either an Event, Document, or Transaction, as defined in the NotificationType enumeration.
 - MessageName: The name of the notification message.
 - Status: The current status of the object.
 - StatusDetail: A string that contains human readable descriptions of the status.
 - ObjectId: The unique ID associated with the notification object. It should be the TransactionId for transaction notification, DocumentId for the document notification and the Event Name for event notification. This attribute uses the XSD:ID type which requires and underscore (_) as the first character of the string. (The TO Contractor should refer to http://www.w3.org/TR/xmlschema-2/#ID for more information on the XSD:ID type definition).
- 3.13 TO Contractor shall ensure that the MDE Centralized Node 2.0 Network Exchange System specifies the structure of a specific fault message using the NodeFaultDetailType. This shall be sent whenever an error condition is raised by a Node. The SOAP 1.2 Specification requires that this fault message be the child of the Detail element within the root Body element of the SOAP message. The ErrorCode element is a list of error codes that are specific to the Exchange Network (see Table 2) and the description is a text string description of the error condition. The MDE Centralized Node 2.0 Network Exchange shall provide fault detail information whenever possible.
- 3.14 In addition to the error codes listed in Table 2, the Node 2.0 system shall also return the native database management system (DBMS) error code if a database operation fails.
- 3.15 TO Contractor shall ensure that the error description is a human readable string description of the error and the value of this element should be a detailed description of the specific nature or cause of the error.

Table 2 - Exchange Network Error Codes and Data Validation Criteria

Error Code	Description	Data Validation Criteria
E_UnknownUser	The user could not be found.	Check for valid user
E_InvalidCredential	The user credential is invalid.	check for valid credential
E_TransactionId	A transaction ID could not be found.	Check for valid transaction ID
E_UnknownMethod	The requested method is not supported.	Check for valid methods
E_ServiceUnavailable	The requested data service or web service is undefined.	Check for valid data services and web services
E_AccessDenied	The operation could not be performed due to lack of privilege.	Check for valid privilege
E_InvalidToken	The security token is invalid.	Check for valid security token
E_TokenExpired	The security token has expired.	Check for unexpired security token
E_FileNotFound	The requested file could not be located.	Check for requested file
E_ValidationFailed	XML schema or schematron validation error.	Check for valid schema or schematron
E_ServerBusy	The service is too busy to handle the request at this time, please try later.	Check for service availability
E_RowIdOutofRange	The Rowld parameter is out of range.	Check for RowID parameter out of range
E_FeatureUnsupported	The requested feature is not supported.	Check for valid requested feature

Error Code	Description	Data Validation Criteria
E_VersionMismatch	The request is a different version of the protocol.	Check for valid protocol version
E_InvalidFileName	The name element in the nodeDocument structure is invalid.	Check for valid File Name
E_InvalidFileType	The type element in the nodeDocument structure is invalid or not supported.	Check for valid type element
E_InvalidDataFlow	The dataflow element in a request message is not supported.	Check for valid data flow element
E_InvalidParameter	One of the input parameters is invalid.	Check for valid input parameters
E_AuthMethod	The authentication method is not supported.	Check for valid authentication method
E_Unknown	An unknown or undefined error has occurred.	Check for unknown errors
E_QueryReturnSetTooBi	The result set specified is too large to return.	Check for size of specified return set
E_DBMSError	The database returned an error.	Check for database errors
E_RecipientNotSupporte d	The recipient functionality is not supported	Check for supported recipient functionality
E_NotificationURINotSu pported	The NotificationURI functionality is not supported.	Check for supported Notification URI functionality

- 3.16 TO Contractor shall ensure that the MDE Centralized Node 2.0 Network Exchange System is able to specify a NotificationURI type for the Solicit and Submit. This type shall include a structure of specific events and the NotificationTypeCode is used to control when the notification address should be messaged.
- 3.17 MDE Centralized Node 2.0 Network Exchange System shall support persistent attachment management resulting from the payload on the Submit or from content generated by the internal processes. The TO Contractor shall develop a scalable and secure environment in a location, other than the server that hosts the Node 2.0, as not to compromise the security of the server. Should the TO Contractor's recommended approach be to distribute across multiple servers (i.e. clustering) each one of these should have access to the internally stored attachments.
- 3.18 TO Contractor shall create a framework of web services such that data exchanges of any type between Nodes can be conducted seamlessly and automatically. The web interface layer of the framework will create fully programmable environments to build automated tools to send documents to the network or to track previous submissions. The following are the key web methods that must be implemented in the MDE Centralized Node 2.0 Network Exchange System.
 - Authenticate
 - Submit
 - Query
 - GetStatus
 - Notify
 - Solicit
 - Download
 - NodePing
 - GetServices
 - Optional methods may include Execute
- 3.19 The MDE Centralized Node 2.0 Network Exchange System shall utilize Node Services Interfaces as defined by the EPA Exchange Network. The Node Services shall be classified into the following four (4) main interfaces. (See Table 3)

Table 3 – Node Services Interfaces

Interface	Methods	Description
Data Submission	Submit, Notify, Download	A group of methods for sending arbitrary documents to a service provider and retrieving the results.
Data Publishing	Query, Solicit, Download	A set of methods for information retrieval from a service provider. The interface provides a framework for performing database queries.
Service Invocation	Execute, Download	A set of methods for offering services other than data services. This is a generic extension framework for adding extra services without redesigning and implementing a web service layer.
Administration	NodePing, GetServices, GetStatus	Methods for network-wide coordination and management.

4.0 General Hardware Requirements

- 4.1 All hardware, server-based applications and designed systems procured, as recommended by the winning bidder of this TORFP, shall meet the goals established by this TORFP that do not conflict with standards set by MDE's Office of Information Technology (OIMT). Such standards shall include meeting MDE's OIMT:
 - Minimum server hardware standards (i.e., HP Proliant DL-series servers, two quad-core processors, 8GB memory, RAID-able internal storage controllers with battery backed cache, two internal 10/100/1000 NICs, separate internal remote server management cards, etc.)
 - Minimum server hardware maintenance support standard (three year of support with 4 hour, 24x7x365 coverage by the server manufacturer)
 - Server network operating system standard (i.e., Windows Server 2008 x64 Enterprise Edition, Novell Netware 6.5 or Novell SuSE Linux 11, unless another operating system is required and approved for specialized applications)
 - Server operating system software support standards (Microsoft-MDE Enterprise agreement including Software Assurance; Novell-MDE Master Licensing Agreement)
 - Application software support standards (appropriate [as determine by application custodian] maunfacturer-based technical support; software upgrades/patches; telephone/email/onsite technical support, etc.)
 - Enterprise server backup software standards (Syncsort backup Express (inside network); Symantec backup Exec (DZM network)
 - Enterprise relational database management system (RDBMS) standards (i.e., Oracle version 10g or Microsoft SQL Server 2008 unless another RDBMS is required and approved for specialized applications
 - Enterprise Network Topology Standards (servers in MDE server farm in MDE Data Center, publicly accessible servers in MDE DMZ only, no internal eDirectory/Active Directory communications in MDE's DMZ, etc.)

- Enterprise Network Security Standards (adherence to State of Maryland Information Security Policy in general and MDE exceptions in particular; application-based security for all applications)
- Enterprise Disaster Recovery Plan standards (recovery at alternate sites for any/all hardware/software/applications; ability to backup server data to appropriate media; recovery to standby hardware, etc.)

5.0 Dataflows

- 5.1 The MDE Centralized Node 2.0 Network Exchange System shall support all critical requirements for dataflows including the ability to "package" the relevant data using Extensible Markup Language (XML) schemas developed by Exchange Network partners.
- 5.2 The MDE Centralized Node 2.0 Network Exchange System shall support large payloads for data publishing.
- 5.3 The MDE Centralized Node 2.0 Network Exchange System shall use SOAP 1.2 and MTOM (Message Transmission Optimization Mechanism) for attachments. Emerging industry standards will be used as consistently as possible in the application of these protocols.
- 5.4 The MDE Centralized Node 2.0 Network Exchange System shall be able to process incoming data payloads and integrate them into the internal data stores.
- 5.5 TO Contractor shall work with MDE OIMT and Business Program staff to identify the source data system(s) that will support the data exchange and determine how the exchange will be achieved.
- 5.6 TO Contractor shall work with MDE OIMT and Business Program staff to develop the individual Flow Configuration Document (FCD) for the selected exchange. This document describes the types of data services that the Partner must provide to support the exchange of data. In some cases the FCD may include alternative or optional data services. The TO Contractor and MDE OIMT and Business Program staff will identify the appropriate data services to be implemented.
- 5.7 Based upon the current status of the individual data flow, the TO Contractor and MDE OIMT staff shall map MDE source databases and identify potential issues.
- 5.8 TO Contractor and MDE OIMT staff should examine the structure and content of the existing system database(s) and map them to the XML Schema for each data exchange as needed. This shall be based upon the current status of the individual data flow.
- 5.9 TO Contractor shall use Altova XMLSpy for XML manipulation, XML validation, design of XML schemas and transformation style sheets.
- 5.10 TO Contractor may also recommend additional products such as the EPA Schematron tool to perform contextual validation of XML files, validate look-up values that reside outside of the XML schema, as well as to address more complex business rules.
- 5.11 TO Contractor shall define the data extraction procedures from the source systems. The TO Contractor may recommend alternative ways that data can be extracted from source systems to respond to exchange requests. The choice of which to use may be dependent upon the architecture, but may also be dependent upon the nature of the exchange being implemented.
- 5.12 TO Contractor shall work with MDE OIMT and Business Program staff to resolve Issues with Trading Partner(s). Any questions about the data or the XML Schema should be discussed with the Business Program staff or trading partner to ensure that the data is being exchanged in an acceptable way. The resolution should be documented so that they can be incorporated into the Trading Partner Agreement (TPA). This may include:
 - Mapping look-up code values
 - Data elements that need clarification of their definition and use
 - How to handle data quality issues, historical data, etc.
- 5.13 TO Contractor shall work with OIMT and MDE Business Partners to support the internal testing of the data exchange and resolve data issues (e.g., data elements that do not directly map to permitted values as specified in the XML schema).

- 5.14 TO Contractor shall provide NAAS security testing.
- 5.15 TO Contractor shall support testing of the exchange (e.g., providing a sample XML document, invoking a test request from the Node).
- 5.16 TO Contractor shall develop the necessary data exchange service request components in the selected target technical environment. This functionality will reside behind the basic Node Web service interface and will be developed to process and manage the incoming requests to the Node.
- 5.17 Components shall be developed to manage the extraction of information from the source systems. Depending on the exchange design agreed on during the previous task, these components may be database level or middle-tier components.
- 5.18 TO Contractor shall work with OIMT and MDE Business Program staff to test the Exchange. The selected data exchange shall be tested to evaluate responses to incoming service requests, the exchange operations and the correctness of the returned XML documents. Test extracts should be submitted to the US EPA or the appropriate exchange Partner for testing and evaluation for completeness and accuracy.
- 5.19 Following testing of the Node and data exchange components, corrections shall be made to the developed components as necessary.
- 5.20 TO Contractor shall work with OIMT and MDE Business Program staff to develop Trading Partner Agreements to manage and provides a context for any Partner that wishes to access and use the data that is being made available. This work should take into account the published TPA development guidelines (available on the Exchange Network Web site), and may be further informed by any template TPA that may have been developed for the data exchange.
- 5.21 TO Contractor shall ensure that the MDE Node 2.0 Network Exchange shall support the three types of document definitions.
 - XML Documents: The most commonly used document type on the Exchange Network. XML
 documents are structured using an external, predefined schema, and may be included directly
 in the body of a SOAP message or attached outside of the SOAP envelope via the MTOM
 attachment mechanism.
 - Non XML Documents: Data can be in a wide range of formats including .txt.
 - Compressed Documents: Documents that have been reduced in size using the ZIP compression algorithm. Documents that have been compressed using the ZIP compression algorithm shall automatically "Unzip" as part of the specific data flow. Compressed documents have no predefined structure, but may contain structured (XML) contents when decompressed.
- 5.22 TO Contractor shall ensure that there is a separation of the Node 2.0 and the individual dataflow exchange implementations. As new dataflow exchanges are added, the already deployed Node 2.0 infrastructure shall use the new exchange extension to ensure there is no disruption or risk of alteration to the Node itself.

6.0 Security and Authentication

- 6.1 TO Contractor shall follow generally accepted industry best practices such as SANS (Sysadmin Audit Network Security) Institute, OWASP (Open Web Application Security Project) and NIST (National Institute of Standards Technology).
- 6.2 TO Contractor shall provide for authenticating inbound communication and shall ensure that all authentication occurs on MDE's DMZ.
- 6.3 TO Contractor shall provide a method to block inbound requests via IP address or user ID.
- 6.4 The Node 2.0 shall scan for various viruses, spyware and malware.
- 6.5 The version Node 2.0 shall provide for log files that will be created to document the authorization requests via web services. The Node 2.0 shall log transactions in a persistent storage area that retains the following information:
 - Security Token of the document submitter
 - Time Received

- Transaction Status
- 6.6 The Node 2.0 shall provide the capability to track transactions by transaction ID or the NAAS ID of the document submitter. It is also recommended that a log that contains detailed processing steps be provided to assist debugging.
- 6.7 The Node 2.0 shall have access to an SMTP server for implementing the NotificationURI and Recipient functionality.
- 6.8 The Node 2.0 shall use an authenticate method to authenticate a user using the supplied credential.
- 6.9 The Node 2.0 shall return a security token when successful. The security token shall be included in all other method invocations, except NodePing, as a proof of identity.
- 6.10 The security token shall be a string that is transparent and is meaningful only to the issuer or trusted partners. It may include, but is not limited to, the following information:
 - The Use ID or Profile Name
 - A session ID for State management
 - A timestamp for aging and expiration
 - User properties such as user group or IP address.
- 6.11 TO Contractor shall implement an aging strategy to prevent replay attack. An expired token should be discarded immediately. A suggested token life span is about ten (10) minutes.
- 6.12 The MDE Centralized Node 2.0 Network Exchange System shall utilize Secure Socket Layer (SSL) technology in order to be compliant with the EPA Exchange Network. The Node shall be hosted from an environment where the certificate is issued by a well known party and it's full path is recognized by all common browsers. All messages, including Authenticate, must be sent using the SSL transport mechanism.
- 6.13 The MDE Centralized Node 2.0 Network Exchange System shall include Network Authentication and Authorization Service (NAAS) to provide complete authentication and authorization services for the Exchange Network.
- 6.14 The MDE Centralized Node 2.0 Network Exchange may also support a local security model utilizing a single sign-on. This approach may allow for a closer integration into the existing security model without the need for replication of existing accounts on the National level.
- 6.15 The NAAS shall provide authorization capabilities for 'recipients.' Nodes forwarding submissions through the 'recipients' parameter will need to use their own NAAS credential to authenticate with the receiving node. The Node 2.0 shall only honor 'recipient' values from trusted partners who have been explicitly permitted to make use of this functionality. The TO contractor should use 'recipients' only when it reduces complexity and improves functionality of a business process.
- 6.16 MDE Node administrators shall be able to define which users can make use of this function through standard NAAS policies.
- 6.17 Specific security models and error conditions/messages shall be defined on a flow by flow basis.

7.0 Training

- 7.1 TO Contractor shall conduct training in MDE's training room located at Montgomery Park.
 7.1.1 Training room accommodates 18 students.
- 7.2 TO Contractor shall provide training for up to 15 MDE designated end-users and administrators on the use and administration of the MDE Centralized Node 2.0 Network Exchange System.
- 7.3 TO Contractor shall provide all training materials for the MDE Centralized Node 2.0 Network Exchange System.

8.0 Warranty Period

The TO Contractor shall warrant for 90 days after acceptance by MDE the entire system solution, including the software, system design, RDBMS configuration, hardware configuration, hosting platform, network components, integration, plan implementation, data conversion, and all other services required under the Contract on a "turnkey"

basis, i.e., the TO Contractor must itself be contractually responsible for all warranty obligations and must be the single point of contact for service under the warranty. The 90 days warranty will begin on the date that MDE officially accepts in writing the system as complete.

The TO Contractor shall provide support for the system for the warranty period after issuance of the written acceptance by MDE. This support must include troubleshooting, the correction of any system bugs, defects or deficiencies, and the resolution of any operating problems. During this period, the TO Contractor shall provide, at no additional cost, unlimited technical support by telephone and, if the problem cannot be resolved within 48 hours, shall provide on-site or remote (remote support VPN or Terminal services via Internet connection) service and support to resolve the problem.

If the TO Contractor develops modifications or upgrades to the system during the warranty support period, these shall be provided to the MDE free of charge and included within the warranty.

MDE will use the same corrective action procedure as described under acceptance testing section.

ATTACHMENT 15 – REQUIREMENTS TRACEABILITY MATRIX (RTM)

Req. ID (unique ID)	Req. Description	Ref. in Functional Requirements Document	Node 2.0 Solution		Verification Method	Requirement Reference in Design Doc	Fit Gap	Requirement Reference in Test Plan
			Out of Box	Customize				

As each requirement is identified and validated during the gathering of the System and Functional Requirements, the RTM shall be updated by the Offeror based on the proposed COTS solution. Each requirement is included in the RTM along with the associated section number. As the project progresses, the RTM is updated to reflect each requirement's status. When the product is ready for system testing, the RTM lists each requirement, what product component addresses it, and the test used to verify that it is correctly implemented.

EXHIBIT A

TO CONTRACTOR'S EMPLOYEES AND AGENTS WHO WILL BE GIVEN ACCESS TO THE CONFIDENTIAL INFORMATION

Printed Name and Address of Employee or Agent		Signature	Date
	-		
	-		
	-		
	-		
	<u> </u>		