



**Consulting and Technical Services II (CATS II)
Task Order Request for Proposals (TORFP)**

**MAXIMO IMPLEMENTATION AND
MIGRATION SERVICES**

MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT)

CATS II TORFP PROJECT NUMBER #J01P9200271

ISSUE DATE: June 19, 2009

CONTENTS

SECTION 1 - ADMINISTRATIVE INFORMATION..... 5

- 1.1 RESPONSIBILITY FOR TORFP AND TO AGREEMENT 5
- 1.2 TO AGREEMENT 5
- 1.3 TO PROPOSAL SUBMISSIONS 5
- 1.4 ORAL PRESENTATIONS/INTERVIEWS 5
- 1.5 CONFLICT OF INTEREST 5
- 1.6 NON-DISCLOSURE AGREEMENT 6
- 1.7 LIMITATION OF LIABILITY CEILING 6
- 1.8 CONTRACT MANAGEMENT OVERSIGHT ACTIVITIES 6

SECTION 2 – SCOPE OF WORK..... 7

- 2.1 BACKGROUND, OBJECTIVE AND ORGANIZATIONAL STRUCTURE 7
- 2.2 REQUIREMENTS 8
- 2.3 SPECIFIC TASK REQUIREMENTS: 9
- 2.4 TO CONTRACTOR EXPERTISE REQUIRED 11
- 2.5 TO CONTRACTOR MINIMUM QUALIFICATIONS 11
- 2.6 PERFORMANCE EVALUATION 11
- 2.7 NON-PERFORMANCE OF PERSONNEL 12
- 2.8 SUBSTITUTION OF PERSONNEL 12
- 2.9 PROPOSED STAFFING 12
- 2.10 INVOICING 12
- 2.11 INVOICE SUBMISSION PROCEDURE 13
- 2.12 MBE PARTICIPATION REPORTS 13
- 2.13 CHANGE ORDERS 13

SECTION 3 - TASK ORDER PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS ... 14

- 3.1 REQUIRED RESPONSE 14
- 3.2 FORMAT 14

SECTION 4 - PROCEDURE FOR AWARDING A TASK ORDER AGREEMENT 17

- 4.1 EVALUATION CRITERIA 17
- 4.2 TECHNICAL CRITERIA 17
- 4.3 SELECTION PROCEDURES 17
- 4.4 COMMENCEMENT OF WORK UNDER A TO AGREEMENT 17

ATTACHMENT 1 – PRICE PROPOSAL 19

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS 25

ATTACHMENT 3 – TASK ORDER AGREEMENT 33

ATTACHMENT 4 – CONFLICT OF INTEREST AFFIDAVIT AND DISCLOSURE 36

ATTACHMENT 5 – LABOR CLASSIFICATION PERSONNEL RESUME SUMMARY 37

ATTACHMENT 6 – DIRECTIONS 39

ATTACHMENT 7 – NOTICE TO PROCEED 40

ATTACHMENT 8 – AGENCY RECEIPT OF DELIVERABLE FORM 41

ATTACHMENT 9 – AGENCY ACCEPTANCE OF DELIVERABLE FORM 42

ATTACHMENT 10 – NON-DISCLOSURE AGREEMENT (OFFEROR) 43

ATTACHMENT 11 – NON-DISCLOSURE AGREEMENT (TO CONTRACTOR) 44

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. All Master Contractors must complete and submit a Master Contractor Feed back form via the CATS II web site regardless of whether a TO Proposal is submitted or not. 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 (DoIT) and subsequent Master Contract Project Number 060B9800035, including any amendments.

TORFP Title:	Maximo Implementation and Migration Services
Functional Area:	Functional Area 2 – Web and Internet Systems
TORFP Issue Date:	June 19, 2009
Closing Date and Time:	July 15, 2009 at 12:00 PM
TORFP Issuing Agency:	Maryland Department of Transportation (MDOT) Office of Transportation Technology Services
Send Questions and Proposals to: Questions must be submitted no later than 10 working days prior to TORFP closing date.	Barbara Ryer, Procurement Officer Bryer@mdot.state.md.us
TO Contracts Administrator:	Mr. Carl Stein Office Phone Number: 410-865-1315 Office FAX Number: 410-865-1103
TO Project Manager:	Mr. Brian Schade Office Phone Number: 410-865-1184 Office FAX Number: 410-865-1103
TO Project Number:	J01P9200271
TO Type:	Time and Material
Period of Performance:	Notice to Proceed until May 31, 2014
MBE Goal:	10%
Small Business Reserve (SBR):	No
Primary Place of Performance:	MD Department of Transportation 7201 Corporate Center Drive Hanover, MD 21076
TO Pre-proposal Conference:	MD Department of Transportation 7201 Corporate Center Drive

	<p>Hanover, MD 21076</p>
--	--------------------------

Monday, July 01, 2009 at 10:00 AM, Trainor Room 1st Floor

See Attachment 5 for 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 scope issues, and for authorizing any changes to the TO Agreement. See Section 2.13 for information on change orders.

The TO Manager has the primary responsibility for the management of the work performed under the TO Agreement; 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 TO Agreement, Attachment 2, 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 stated date and exact time. The time will be local time as determined by Maryland Department of Transportation's e-mail system time stamp. 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 #J01P9200271. The first file will be the TO Proposal technical response to this TORFP and titled, "CATS II TORFP #J01P9200271 Technical". The second file will be the financial response to this CATS II TORFP and titled, "CATS II TORFP #J01P9200271 Financial". The following proposal documents must be submitted with required signatures as .PDF files with signatures clearly visible:

- Attachment 1 – Price Proposal
- Attachment 3 - Conflict of Interest and Disclosure Affidavit

1.4 ORAL PRESENTATIONS/INTERVIEWS

All Master Contractors may 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.

1.5 CONFLICT OF INTEREST

The TO Contractor awarded the TO Agreement 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 3 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.

1.6 NON-DISCLOSURE AGREEMENT

Certain system documentation may be available for potential Offerors to review in a reading room at Maryland Department of Transportation's Headquarters located at 7201 Corporate Center Drive, Hanover, MD, 21076. Offerors who review such documentation will be required to sign a Non-Disclosure Agreement (Offeror) in the form of Attachment 9. 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 TO Agreement in order to fulfill the requirements of the TO Agreement. 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 10.

1.7 LIMITATION OF LIABILITY CEILING

Pursuant to Section 28(C) of the CATS II Master Contract, the limitation of liability per claim under this TORFP shall not exceed the total TO Agreement amount established.

1.8 CONTRACT MANAGEMENT OVERSIGHT ACTIVITIES

Maryland Department of Information Technology (DoIT) will be performing 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 (TO). 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.

DoIT will send checklists out to applicable TO Contractors approximately three months after the Notice To Proceed date for a TO Agreement, and approximately every six months thereafter. The TO Contractor awarded the TO Agreement shall complete and return the TO Contractor Self-Reporting Checklist within two weeks of receipt as instructed on the checklist.

1.9 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.**

SECTION 2 – SCOPE OF WORK

2.1 BACKGROUND, OBJECTIVE AND ORGANIZATIONAL STRUCTURE

2.1.1 BACKGROUND

The Maryland Department of Transportation (MDOT) is currently in the process of consolidating multiple instances of their asset management application, IBM Maximo 4.1.1, into one enterprise level and centralized IBM Maximo 6 with Maximo 6.3 Transportation add-on. MDOT has completed an implementation of IT Asset Management and Tivoli Service Desk to manage all IT assets and provide service support and delivery throughout all Transportation Business Units (TBUs). There are three TBUs now in production with Enterprise Asset Management (EAM) and efforts are underway to implement EAM throughout the remaining TBUs. The general philosophy to the Maximo implementation is to adhere to industry best practices and maintain out-of-box functionality when at all possible.

2.1.2 OBJECTIVE

The objective of this TORFP is to obtain the services of a TO Contractor to implement Maximo 6 EAM throughout the remaining TBUs and migrate existing Maximo 4.1.1 data. During this implementation, MDOT will be pursuing an upgrade to Maximo version 7.1 and therefore the TO Contractor will be required to adapt to the updated version when it becomes available. All work to be performed under this Task Order shall be on a Time & Material basis; using the proposed labor rates under the CATS II Master Contract for that current year.

MDOT's current Maximo production environment consists of the following:

- Maximo v6.2.1 with Transportation v6.3
- Weblogic Application Server 8.1.4.0
- Windows 2003 5.2 Server Operating System
- Maximo Enterprise Adapter
- Oracle 10.2.0.1.0 Database on Sun Unix
- Active Directory 2000 Authentication
- Actuate 8
- Discovery 2005
- Syclo Agency 4.3.0.3 (Work Manager, Inventory Manager, and Auditor)

2.1.3 ORGANIZATIONAL STRUCTURE

MDOT is comprised of a total of seven TBUs with approximately 9,000 users. The sites include Maryland Aviation Administration (MAA), Maryland Transportation Authority (MdTA), Maryland Port Administration (MPA), Maryland Transit Administration (MTA), Maryland Motor Vehicle Administration (MVA), State Highway Administration (SHA) and Transportation Secretary Office (TSO). Please see Exhibit B for an overview of MDOT's network architecture and Exhibit C for an overview of MDOT's Maximo environment.

2.2 REQUIREMENTS

2.2.1 The TO Contractor shall provide certified Maximo professionals for providing onsite implementation and migration services as outlined below. The Maximo professionals must have an extensive understanding of asset management and asset inventory. The hours provided for under this task order will be utilized on an as needed basis with prior written authorization.

2.2.2 The TO Contractor will be responsible for the following:

2.2.2.1 The TO Contractor shall continue with the implementation of Maximo 6 EAM with Transportation 6.3 as well as migrate existing data for each TBU separately and according to an order established by MDOT.

2.2.2.2 The TO Contractor shall conduct a high-level review of the existing Maximo 6 enterprise environment to gain an understanding of the current product usage, features and data elements utilized by MDOT.

2.2.2.3 The TO Contractor shall provide all documentation in accordance with the State's System Development Life Cycle (SDLC) as detailed in section 2.4 of this TORFP or another agreed upon format.

2.2.2.4 The TO Contractor shall provide agendas and minutes for all meetings and working sessions held throughout the phases of the implementation and migration efforts.

2.2.2.5 On a weekly basis, the TO Contractor shall provide MDOT with formal written status reports to include progress, issues, and concerns related to the efforts.

2.2.2.6 The TO Contractor shall conduct sessions with each TBU to gather and review all business processes as it relates to the implementation of Maximo and the migration of existing Maximo 4.1.1 data.

2.2.2.7 The TO Contractor shall provide an implementation and migration plan, project schedules and other various project documentation as determined required by MDOT.

2.2.2.8 The TO Contractor shall review current business practices, procedures, and workflow processes to gain an understanding of each TBU's business objectives and refine the scope of work in accordance with the identified objectives.

2.2.2.9 The TO Contractor shall map existing functionality to the Maximo enterprise system to include work orders, purchase orders, work requests, inventory, contracts, preventative maintenance, crafts, and labor.

- 2.2.2.10 The TO Contractor shall document and obtain approval of a Requirements Specification Document detailing each TBU's business process, functional requirements, and suggested business process improvements.
- 2.2.2.11 The TO Contractor shall define all use cases required by the business processes as they relate to strategic asset management and consider various integration scenarios.
- 2.2.2.12 Under the guidance of MDOT's Maximo project team, the TO Contractor shall configure Maximo enterprise to meet each TBU's requirements and document such configurations in a System Design Document.
- 2.2.2.13 Prior to implementation, the TO Contractor shall translate requirements into a development and test environment to validate compliance and allow testing and feedback.
- 2.2.2.14 The TO Contractor shall work in collaboration with MDOT's Maximo project team during all ongoing efforts associated with Maximo. These efforts may include system integrations using the MEA, mobile applications using Syclo or Maximo Mobile, Maximo training, and Linear Asset Development.
- 2.2.2.15 The TO Contractor shall develop Actuate, Business Intelligence and Reporting Tools (BIRT), and Crystal report specifications in addition to developing, testing, and implementing such reports.
- 2.2.2.16 The TO Contractor shall be responsible for migrating existing Maximo 4.1.1 data into the enterprise environment through use of the Maximo Enterprise Adapter (MEA) or Dataloader.
- 2.2.2.17 The TO Contractor shall be responsible for all efforts associated with application configuration, database system configuration, data migration and loading, system and integration testing, user acceptance testing, system performance testing, and post integration support.
- 2.2.2.18 The TO Contractor shall develop a test and evaluation plan as well as assist MDOT with the testing of all implemented Maximo configurations and modifications.
- 2.2.2.19 The TO Contractor shall follow the Change Request process as established by MDOT. The MDOT Program Manager and the MDOT Project Manager will manage the scope throughout the project.
- 2.2.2.20 The TO Contractor shall provide a laptop computer or a desktop computer with monitor, mouse, and keyboard for each labor resource that is identified under this TORFP.

2.3 SPECIFIC TASK REQUIREMENTS:

For each written task, project, draft and final, the TO Contractor shall submit to the TO Manager one hard copy and one electronic copy compatible with Microsoft Office 2003, Microsoft Project 2003 and/or Visio 2003.

Drafts of all assigned tasks or projects are required at least two weeks in advance of when all final deliverables are 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 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 written notice of acceptance or rejection of the deliverables. In the event of rejection, the TO Contractor shall correct the identified deficiencies or non-conformities. Subsequent 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 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. Accepted deliverables shall be invoiced within 30 days in the applicable invoice format (Reference 2.11 Invoicing).

When presented for acceptance, a written deliverable defined as a final document must satisfy the scope and requirements of this TORFP for that deliverable. Final written deliverables shall not contain structural errors such as poor grammar, misspellings or incorrect punctuation, and must:

- A) Be presented in a format appropriate for the subject matter and depth of discussion.
- B) Be submitted electronically and in an electronic format specified by the TO Manager.
- C) Be organized in a manner that presents a logical flow of the deliverable's content.
- D) Represent factual information reasonably expected to have been known at the time of submittal.
- E) Present information that is relevant to the Section of the deliverable being discussed.

Below are examples of other tasks to be performed by the TO Contractor

	Examples of Expected Tasks / Milestones	Schedule Proposed
1	Meeting agendas and minutes.	For each TBU throughout the term of the task order.
2	Weekly status reports.	For each TBU throughout the term of the task order.
3	Implementation and Migration Plan	For each TBU throughout the term of the task order.
4	Requirements Specification Document	For each TBU throughout the term of the task order.
5	System Design Document	For each TBU throughout the term of the task order.
6	Documented Use Cases	For each TBU throughout the term of the task order.

7	Project Schedule	For each TBU throughout the term of the task order.
8	Actuate, BIRT, and Crystal Report Specifications	For each TBU throughout the term of the task order.
9	Actuate, BIRT, and Crystal Reports	For each TBU throughout the term of the task order.
10	Test and Evaluation Plans	For each TBU throughout the term of the task order. .

At the direction of MDOT, the Contractor shall be responsible for generating all Project Management and SDLC documentation. Such documentation will be reviewed and approved by MDOT.

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 are located at www.doit.maryland.gov and select “Contractor” and “IT Policies, Standards and Guidelines”; these may include, but are not limited to the following:

- The State’s System Development Life Cycle (SDLC) 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 (PMBOK) Guide. TO Contractor’s staff and subcontractors are to follow a consistent methodology for all TO activities.

2.4 TO CONTRACTOR EXPERTISE REQUIRED

The TO Contractor shall be capable of furnishing all necessary services required to successfully complete all tasks and work requirements and produce high quality deliverables described herein.

2.5 TO CONTRACTOR MINIMUM QUALIFICATIONS

The TO Contractor shall provide IBM certified Maximo professionals that have a broad knowledge of all Maximo applications and have successfully completed a minimum of two (2) implementations of Maximo 6 EAM per their labor category as noted on Attachment #1 – Price Proposal. The individuals shall have experience in mapping and migrating data from previous versions, tailoring implementations and incorporating best practices to analyze, design, develop, and implement Maximo EAM.

The TO Contractor shall demonstrate, in its proposal, that it possesses such expertise in-house or has fostered strategic alliances with other firms for providing such service.

2.6 PERFORMANCE EVALUATION

TO Contractor personnel will be evaluated by MDOT on a schedule consistent with evaluations of personnel for assignments performed. The TO Contractor personnel must maintain at least an

“Exceeds Standards” in each major category of the performance evaluation (i.e., Dependability, Job Knowledge, etc.) and at least a “Meets Standards” in all individual criteria (i.e., Punctuality, Tact, etc.) If prior to a scheduled evaluation the TO Manager has determined there are issues with the performance of TO Contractor personnel, the TO Manager shall notify both the TO Contractor, the MDFOT Contracts Unit and the TO Contractor personnel by email, identifying the issue and the expected action(s) to correct the issues.

2.7 NON-PERFORMANCE OF PERSONNEL

In the event that TSO is dissatisfied with the TO Contractor’s personnel for not performing to the standards specified in Section 2, the TO Contractor personnel may be removed and substituted. Replacement personnel must have qualifications equal to or greater than that of the non-performing person initially proposed and evaluated and accepted in the TO Agreement. The TO Manager will determine the amount of time the TO Contractor has to provide a replacement.

2.8 SUBSTITUTION OF PERSONNEL

The TO Contractor shall propose only staff available at the time of the TO Proposal and that satisfy the personnel qualifications specified in the Master Contract. In addition, the TO Contractor shall abide by the substitution of personnel requirements in the Master Contract.

2.9 PROPOSED STAFFING

The TO Contractor shall provide the resumes of all key project participants being proposed to staff the project (including managers, senior design staff, other key staff, and subcontractor personnel) with an overview of each person’s role and whether they will be assigned part time or full time to the project. Resumes shall reflect qualifications and recent experience relevant to the scope of work and areas of expertise required for this specific project. Each resume shall include at least three (3) references that can be contacted to verify the individual’s qualifications and experience. For each reference, list the individual's name, title, company name or organization, mailing address, and phone number. TSO reserves the right to interview all key project participants proposed by the TO Contractor and either confirm the recommendations, or request alternates.

2.10 INVOICING

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 Employer Identification Number (FEIN), as well as the information described below, and must be submitted to the Project Manager for payment approval.

On-call hours and upgrades performed during non-business hours shall be billed based on actual time worked at the approved TO labor rate

The TO Contractor shall submit monthly invoices for payment that coincide with the submission of the progress reports (on or before the 15th day of the month). The invoices shall identify actual hours by each person assigned to the contract during the reporting period and materials purchased by the contractor for the contract. Invoices shall be accompanied by the Contractor employee timesheets, documenting actual hours worked and services performed in accordance with the requirements of the Task Order.

2.11 INVOICE SUBMISSION PROCEDURE

This procedure consists of the following requirements and steps:

The invoice shall identify the Maryland Department of Transportation / Procurement & Contracts as the TO Requesting Agency, associated Agreement number, date of invoice, period of performance covered by the invoice, and a TO Contractor point of contact with telephone number.

The TO Contractor shall send the original of each invoice and supporting documentation (itemized billing reference for employees and any subcontractors) for payment to TSO at the following address:

MDOT Logistics and Financial Services
Attn: Bill Bryant
MDOT / OTTS
Maryland Department of Transportation
One Orchard Road (Room #416)
Glen Burnie, MD 21060

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 Agreement. In no event shall any invoice be submitted later than 60 calendar days from the Agreement termination date.

2.12 MBE PARTICIPATION REPORTS

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 MDOT 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 should be submitted directly from the subcontractor to MDOT. MDOT 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.

2.13 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 MDOT 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 the MDOT processes and executes a change order.

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 and/or 2) a completed Master Contractor Feedback form submitted electronically via the CATS II web site explaining why the Master Contractor will not be submitting a proposal. The form is accessible via, your 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:

3.2.1 THE TECHNICAL PORTION OF THE TO PROPOSAL SHALL INCLUDE

- A) Proposed Personnel
 - 1) Identify and provide resumes for all proposed personnel by labor category.
 - 2) Provide the names and titles of all key management personnel who will be involved with supervising the services rendered under this TO Agreement.
 - 3) Complete and provide Attachment 4 – Labor Classification Personnel Resume Summary.
- B) Master Contractor and Subcontractor Experience and Capabilities
 - 1) Provide two examples of projects that you have completed that were similar in scope to the one defined in this TORFP Scope of Work. Each of the two examples must include a reference 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 contract(s) supporting the reference.
 - D) The services provided, scope of the contract and performance objectives satisfied as they relate to the scope of this TORFP.
 - E) 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.
 - 1) 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 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 (name, title, telephone number and e-mail address.)

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

C) Proposed Facility

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

D) State Assistance

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

E) 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

The Offeror shall provide the following in the Financial Proposal:

(a) Assumptions: A description of any assumptions formed by the Offeror in developing the Financial Proposal.

(b) Attachment 1 – Completed Financial Proposal, including:

A detailed price breakdown structure(s), for labor hours by skill category and materials, if applicable to accomplish all specified work requirements and a cumulative sum for each category (e.g., labor hours and materials) of prices.

3.2.2.1 PRICE BREAKDOWN STRUCTURE

All Personnel Costs figures shall be fully loaded rates, in accordance with the terms and conditions of the Master Contract.

Labor cost information will be entered into four columns as shown on ATTACHMENT 1, and described below:

- Proposed Labor Category - A listing, by title, of each labor category proposed by the Vendor.
- Hourly Labor Rate - The hourly rate for each labor category (in accordance with the Offeror's price proposal, submitted in response to this CATS II TORFP).

- Total Class Hours - The hourly rate for each labor category (in accordance with the Offeror's price proposal, submitted in response to this CATS II TORFP).
- Total Proposed CATS II TORFP Price – The product of the Hourly Labor Rate times the Total Class Hours.

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 TO Agreement 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 qualifications and experience of the Master Contractor's proposed personnel performing the duties and responsibilities required in Section 2.
- The Master Contractors understanding of the work to be accomplished.
- Satisfactory past performance on engagements provided as reference accounts in the Technical Proposal or other engagements not provided in the Technical Proposal but known to the State.

4.3 SELECTION PROCEDURES

4.3.1 Proposed personnel will be assessed for compliance with the minimum qualifications in Section 2.6 of the TORFP. Master Contractors proposed personnel who fail to meet the minimum qualifications will be disqualified and will not be interviewed.

4.3.2 TO Proposals deemed technically qualified will have their financial proposal considered. All others will receive e-mail notice from the MDOT Contracts Manager or Contract Administrator of not being selected to perform the work.

4.3.3 The State will require interviews with personnel that meet the minimum requirements proposed by each of the qualified Master Contractors. The number of days for interviews will be dependent upon the number of proposals received. The State will notify all Master Contractors by email of specific dates and contact information for scheduling interviews. Master Contractors must ensure that proposed personnel will be available for the interview in order for their technical proposals to be considered for award.

4.3.4 Qualified TO Proposal financial responses will be reviewed and ranked from lowest to highest price proposed.

4.3.5 The most advantageous TO Proposal offer considering technical and financial submission shall be selected for award.

4.4 COMMENCEMENT OF WORK UNDER A TO AGREEMENT

Commencement of work in response to a TO Agreement shall be initiated only upon issuance of a fully executed TO Agreement, Purchase Order and by a Notice to Proceed authorized by the MDOT Contracts Manager.

ATTACHMENT 1 – PRICE PROPOSAL

PRICE PROPOSAL SHEET FOR CATS II TORFP # J01P9200271

All labor rates proposed by the Master CATS II contractors must be fully loaded hourly rates as defined in the Master Contract.

Categories	A	B	C
	Fully Loaded Hourly Labor Rate	Total Hours <i>(For Evaluation Purposes Only)</i> The state does not guarantee the use of all estimated hours proposed.	Total Proposed CATS II TORFP Price
Master Contractors to insert corresponding labor category and hourly labor rate in accordance with the labor categories and requirements of the Master CATS II contract.			
Maximo Implementation Specialist Resource #1 (Insert Labor Category)	\$	2,000	\$
Maximo Implementation Specialist Resource #2 (Insert Labor Category)	\$	2,000	\$
Senior Maximo Consultant (Insert Labor Category)	\$	400	\$
Junior Maximo Consultant (Insert Labor Category)	\$	400	\$
Senior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Junior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Maximo Actuate, BIRT and Crystal Report Developers (Insert Labor Category)	\$	1,000	\$
Total Task Order Cost Year 1:			\$

ATTACHMENT 1 – PRICE PROPOSAL

PRICE PROPOSAL SHEET FOR CATS II TORFP # J01P9200271

All labor rates proposed by the Master CATS II contractors must be fully loaded hourly rates as defined in the Master Contract .

Categories	A	B	C
	Fully Loaded Hourly Labor Rate	Total Hours <i>(For Evaluation Purposes Only)</i> The state does not guarantee the use of all estimated hours proposed.	Total Proposed CATS II TORFP Price
Master Contractors to insert corresponding labor category and hourly labor rate in accordance with the labor categories and requirements of the Master CATS II contract.			
Maximo Implementation Specialist Resource #1 (Insert Labor Category)	\$	2,000	\$
Maximo Implementation Specialist Resource #2 (Insert Labor Category)	\$	2,000	\$
Senior Maximo Consultant (Insert Labor Category)	\$	400	\$
Junior Maximo Consultant (Insert Labor Category)	\$	400	\$
Senior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Junior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Maximo Actuate, BIRT and Crystal Report Developers (Insert Labor Category)	\$	1,000	\$
Total Task Order Cost Year 2:			\$

ATTACHMENT 1 – PRICE PROPOSAL

PRICE PROPOSAL SHEET FOR CATS II TORFP # J01P9200271

All labor rates proposed by the Master CATS II contractors must be fully loaded hourly rates as defined in the Master Contract.

Categories	A	B	C
	Fully Loaded Hourly Labor Rate	Total Hours <i>(For Evaluation Purposes Only)</i> The state does not guarantee the use of all estimated hours proposed.	Total Proposed CATS II TORFP Price
Master Contractors to insert corresponding labor category and hourly labor rate in accordance with the labor categories and requirements of the Master CATS II contract.			
Maximo Implementation Specialist Resource #1 (Insert Labor Category)	\$	2,000	\$
Maximo Implementation Specialist Resource #2 (Insert Labor Category)	\$	2,000	\$
Senior Maximo Consultant (Insert Labor Category)	\$	400	\$
Junior Maximo Consultant (Insert Labor Category)	\$	400	\$
Senior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Junior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Maximo Actuate, BIRT and Crystal Report Developers (Insert Labor Category)	\$	1,000	\$
Total Task Order Cost Year 3:			\$

ATTACHMENT 1 – PRICE PROPOSAL

PRICE PROPOSAL SHEET FOR CATS II TORFP # J01P9200271

All labor rates proposed by the Master CATS II contract must be fully loaded hourly rates as defined in the Master Contract.

Categories	A	B	C
	Fully Loaded Hourly Labor Rate	Total Hours <i>(For Evaluation Purposes Only)</i> The state does not guarantee the use of all estimated hours proposed.	Total Proposed CATS II TORFP Price
Master Contractors to insert corresponding labor category and hourly labor rate in accordance with the labor categories and requirements of the Master CATS II contract.			
Maximo Implementation Specialist Resource #1 (Insert Labor Category)	\$	2,000	\$
Maximo Implementation Specialist Resource #2 (Insert Labor Category)	\$	2,000	\$
Senior Maximo Consultant (Insert Labor Category)	\$	400	\$
Junior Maximo Consultant (Insert Labor Category)	\$	400	\$
Senior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Junior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Maximo Actuate, BIRT and Crystal Report Developers (Insert Labor Category)	\$	1,000	\$
Total Task Order Cost Year 4:			\$

ATTACHMENT 1 – PRICE PROPOSAL

PRICE PROPOSAL SHEET FOR CATS II TORFP # J01P9200271

All labor rates proposed by the Master CATS II contract must be fully loaded hourly rates as defined in the Master Contract.

Categories	A	B	C
	Fully Loaded Hourly Labor Rate	Total Hours <i>(For Evaluation Purposes Only)</i> The state does not guarantee the use of all estimated hours proposed.	Total Proposed CATS II TORFP Price
Master Contractors to insert corresponding labor category and hourly labor rate in accordance with the labor categories and requirements of the Master CATS II contract.			
Maximo Implementation Specialist Resource #1 (Insert Labor Category)	\$	2,000	\$
Maximo Implementation Specialist Resource #2 (Insert Labor Category)	\$	2,000	\$
Senior Maximo Consultant (Insert Labor Category)	\$	400	\$
Junior Maximo Consultant (Insert Labor Category)	\$	400	\$
Senior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Junior Maximo Database Configuration / Application Designer, Sr. - <i>for DataLoading</i> (Insert Labor Category)	\$	1,000	\$
Maximo Actuate, BIRT and Crystal Report Developers (Insert Labor Category)	\$	1,000	\$
Total Task Order Cost Year 5:			\$
Total Task Order Amount for all Five Years			\$

Company Name

Authorized Individual 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.

Submit this with the Financial Response

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

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. J01P9200271, I affirm the following:

1. I acknowledge the overall certified Minority Business Enterprise (MBE) participation goal of **ten percent (10%)** and, if specified in the TORFP. 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 of _____ percent 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 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) MBE Waiver Documentation 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.

I solemnly affirm under the penalties of perjury that the contents of this paper are true to the best of my knowledge, information, and belief.

Offeror Name

Signature of Affiant

Address

Printed Name, Title

Date

SUBMIT AS A .PDF FILE WITH TO RESPONSE

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

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
Task Order Agreement Number J01P9200271	
List Information For Each Certified MBE Subcontractor On This Project	
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	

USE ATTACHMENT D-2 CONTINUATION PAGE AS NEEDED

SUMMARY

TOTAL MBE PARTICIPATION:	_____ %
TOTAL WOMAN-OWNED MBE PARTICIPATION:	_____ %
TOTAL AFRICAN AMERICAN-OWNED MBE PARTICIPATION:	_____ %

Document Prepared By: (please print or type)

Name: _____ Title: _____

SUBMIT AS A .PDF FILE WITH TO RESPONSE

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

FORM D – 2

MINORITY BUSINESS ENTERPRISE PARTICIPATION SCHEDULE (CONTINUED)

List Information For Each Certified MBE Subcontractor On This Project	
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	

SUBMIT AS A .PDF FILE WITH TO RESPONSE

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

FORM D – 3

OUTREACH EFFORTS COMPLIANCE STATEMENT

In conjunction with the bid or offer submitted in response to TORFP # J01P9200271, I state the following:

- 6. Offeror identified opportunities to subcontract in these specific work categories:

- 7. Attached to this form are copies of written solicitations (with bidding instructions) used to solicit certified MBEs for these subcontract opportunities.

- 8. Offeror made the following attempts to contact personally the solicited MBEs:

- 9. Offeror assisted MBEs to fulfill or to seek waiver of bonding requirements.
(DESCRIBE EFFORTS)

 This project does not involve bonding requirements.

- 10. Offeror did/did not attend the pre-proposal conference
 No pre-proposal conference was held.

Offeror Name

By: _____
Name

Address

Title

Date

SUBMIT WITH TO RESPONSE

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

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 # J01P9200271, it and _____,
(Subcontractor Name)

MDOT Certification No. _____, intend to enter into a contract by which the subcontractor shall:

(Describe work to be performed by MBE):

- No bonds are required of Subcontractor
- The following amount and type of bonds are required of Subcontractor:

By:

By:

Prime Contractor Signature

Subcontractor Signature

Name

Name

Title

Title

Date

Date

Submit with TO Response

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

FORM D – 5

MINORITY BUSINESS ENTERPRISE PARTICIPATION TO CONTRACTOR PAID/UNPAID INVOICE REPORT

Report #: _____ Reporting Period (Month/Year): _____ Report is due by the 15th of the following month.	CATS TORFP # J01P9200271 Contracting Unit _____ Contract Amount _____ MBE Sub Contract Amt _____ Contract Begin Date _____ Contract End Date _____ Services Provided _____
---	--

Prime TO Contractor:		Contact Person:	
Address:			
City:		State:	ZIP:
Phone:	FAX:		
Subcontractor Name:		Contact Person:	
Phone:	FAX:		
Subcontractor Services Provided:			
List all unpaid invoices over 30 days old received from the MBE subcontractor named above:			
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:

Brian Schade TO Manager bschade@mdot.state.md.us	compliancereports@mdot.state.md.us
--	--

Signature: _____ Date: _____

SUBMIT AS REQUIRED IN TO CONTRACTOR MBE REPORTING REQUIREMENTS

ATTACHMENT 2 – MINORITY BUSINESS ENTERPRISE FORMS

FORM D – 6

MINORITY BUSINESS ENTERPRISE PARTICIPATION SUBCONTRACTOR PAID/UNPAID INVOICE REPORT

Report #: _____ Reporting Period (Month/Year): ____/____ Report Due By the 15th of the following Month.	CATS TORFP # J01P9200271 Contracting Unit _____ Contract Amount _____ MBE Sub Contract Amt _____ Contract Begin Date _____ Contract End Date _____ Services Provided _____	
MBE Subcontractor Name:		
MDOT Certification #:		
Contact Person:		
Address:		
City:	State:	ZIP:
Phone:	FAX:	
Subcontractor Services Provided:		
List all payments received from Prime TO Contractor during reporting period indicated above. 1. 2. 3. Total Dollars Paid: \$ _____	List dates and amounts of any unpaid invoices over 30 days old. 1. 2. 3. Total Dollars Unpaid: \$ _____	
Prime TO Contractor:		Contact Person:

Return one copy of this form to the following address:

Brian Schade TO Manager bschade@mdot.state.md.us	compliance@mdot.state.md.us
--	--

Signature: _____ Date: _____

SUBMIT AS REQUIRED IN TO CONTRACTOR MBE REPORTING REQUIREMENTS

ATTACHMENT 3 – TASK ORDER AGREEMENT

CATS II TORFP# J01P9200271 OF MASTER CONTRACT #060B9800035

This Task Order Agreement (“TO Agreement”) is made this day of Month, 200X by and between Task Order Contractor (TO Contractor) and the STATE OF MARYLAND, MD Department of Transportation.

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 MD Department of Transportation, as identified in the CATS II TORFP # ADPICS PO.
 - b. “CATS II TORFP” means the Task Order Request for Proposals # ADPICS PO, dated MONTH DAY, YEAR, including any addenda.
 - c. “Master Contract” means the CATS II Master Contract between the Department of Information Technology (DoIT) and TO Contractor dated May 20, 2009.
 - 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 MD Department of Transportation and TO Contractor.
 - f. “TO Contractor” means the CATS II Master Contractor awarded this TO Agreement, whose principal business address is _____ and whose principal office in Maryland is _____.
 - g. “TO Manager” means TO Manager 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.
 - j. “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 three (3) years, commencing on the date of Notice to Proceed and terminating on the last day of the month three (3) years from the date of the NTP.

Consideration and Payment

- 3.1 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.
- 3.2 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.
- 3.3 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.
- 3.4 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.

By: Type or Print TO Contractor POC

Date

Witness: _____

STATE OF MARYLAND, MD Department of Transportation

By: Peter Arrey, 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 Representative and Affiant)

SUBMIT AS A .PDF FILE WITH TO RESPONSE

ATTACHMENT 5 – LABOR CLASSIFICATION PERSONNEL RESUME SUMMARY

INSTRUCTIONS:

4. Master Contractors must comply with all personnel requirements under the Master Contract RFP 060B9800035.
5. Only labor categories proposed in the Master Contractors Financial Proposal may be proposed under the CATS II TORFP process.
6. 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.

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.

7. Each form also includes examples of duties to perform. The proposed person must be able to fulfill those duties.
8. 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.
9. 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 6 – DIRECTIONS
TO THE PRE-TO PROPOSAL CONFERENCE

Driving Directions To MDOT Headquarters

7201 Corporate Center Dr.

Hanover, Md. 21076

Baltimore:

From 695; Take Baltimore –Washington Parkway (295) south to I-195 towards the BWI airport. Take I-195 to Md. Rte 170 south towards Dorsey. Go to the fifth traffic light and turn left on Stoney Run rd. Take Stoney Run rd. through traffic light to stop sign. Turn left on Old Stoney Run Rd. Take Old Stoney Run Rd. to stop sign at Ridge Rd. and turn right. Take Ridge Rd. to the traffic circle and turn right on Corporate Center Dr. Take Corporate Center Dr. to 7201 on left side of road. Parking is on right side of road.

Washington:

From Baltimore-Washington Parkway (295); Take Baltimore-Washington Parkway North to I-195 and exit towards the BWI Airport (East). Take I-195 towards the BWI Airport to Md. Rte.170. Take Md. Rte. 170 south towards Dorsey. Go to the fifth traffic light and turn left on Stoney Run rd. Take Stoney Run rd. through traffic light to stop sign. Turn left on Old Stoney Run Rd. Take Old Stoney Run Rd. to stop sign at Ridge Rd. and turn right. Take Ridge Rd. to the traffic circle and turn right on Corporate Center Dr. Take Corporate Center Dr. to 7201 on left side of road. Parking is on right side of road.

Annapolis:

From I-97; Take I-97 North to Rte.100 towards Columbia (west). Take Rte. 100 to Rte 170 north towards BWI Airport. Take Rte. 170 to the third traffic light and turn right on Stoney Run Rd. Take Stoney Run rd. through traffic light to stop sign. Turn left on Old Stoney Run Rd. Take Old Stoney Run Rd. to stop sign at Ridge Rd. and turn right. Take Ridge Rd. to the traffic circle and turn right on Corporate Center Dr. Take Corporate Center Dr. to 7201 on left side of road. Parking is on right side of road.

ATTACHMENT 7 – NOTICE TO PROCEED

Month Day, Year

TO Contractor Name

TO Contractor Mailing Address

Re: CATS II Task Order Agreement #J01P9200271

Dear TO Contractor Contact:

This letter is your official Notice to Proceed as of Month Day, Year, for the above-referenced Task Order Agreement. Brian Schade of the MD Department of Transportation will serve as your primary contact person on this Task Order. Mr. Schade can be reached by telephone at 410-865-1184 and/or e-mail at bschade@mdot.state.md.us

Enclosed is an original, fully executed Task Order Agreement and purchase order.

Sincerely,

Task Order Procurement Officer

Enclosures (2)

cc: Mr. Brian Schade

ATTACHMENT 8 – AGENCY RECEIPT OF DELIVERABLE FORM

I acknowledge receipt of the following:

TORFP Title: Maximo Implementation and Migration Services

TO Agreement Number: #J01P9200271

Title of Deliverable: _____

TORFP Reference Section # _____

Deliverable Reference ID # _____

Name of TO Manager: Brian Schade

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 OF THE TORFP.

ATTACHMENT 9 – AGENCY ACCEPTANCE OF DELIVERABLE FORM

Agency Name: MD Department of Transportation

TORFP Title: Maximo Implementation and Migration Services

TO Manager: Brian Schade, 410-865-1184

To:

The following deliverable, as required by TO Agreement #J01P9200271, has been received and reviewed in accordance with the TORFP.

Title of deliverable: _____

TORFP Contract Reference Number: Section # _____

Deliverable Reference ID # _____

This deliverable:

Is accepted as delivered.

Is rejected for the reason(s) indicated below.

REASON (S) FOR REJECTING DELIVERABLE:

OTHER COMMENTS:

TO Manager Signature

Date Signed

ISSUED BY THE TO MANAGER AS REQUIRED IN SECTION 2 OF THE TORFP.

ATTACHMENT 10 – NON-DISCLOSURE AGREEMENT (OFFEROR)

This Non- Disclosure Agreement (the “Agreement”) is made this ___ day of _____ 200_, by and between _____ (hereinafter referred to as "the OFFEROR ") and the State of Maryland (hereinafter referred to as " the State").

OFFEROR warrants and represents that it intends to submit a TO Proposal in response to CATS II TORFP #J01P9200271 for Maximo Implementation and Migration Services. In order for the OFFEROR to submit a TO Proposal, it will be necessary for the State to provide the OFFEROR with access to certain confidential information including, but not limited, to _____. All such information provided by the State shall be considered Confidential Information regardless of the form, format, or media upon which or in which such information is contained or provided, regardless of whether it is oral, written, electronic, or any other form, and regardless of whether the information is marked as “Confidential Information”. As a condition for its receipt and access to the Confidential Information described in Section 1.7 of the TORFP, OFFEROR agrees as follows:

1. OFFEROR will not copy, disclose, publish, release, transfer, disseminate or use for any purpose in any form any Confidential Information received under Section 1.7, except in connection with the preparation of its TO Proposal.
2. Each employee or agent of the OFFEROR who receives or has access to the Confidential Information shall execute a copy of this Agreement and the OFFEROR shall provide originals of such executed Agreements to the State. Each employee or agent of the OFFEROR who signs this Agreement shall be subject to the same terms, conditions, requirements and liabilities set forth herein that are applicable to the OFFEROR.
3. OFFEROR shall return the Confidential Information to the State within five business days of the State’s Notice of recommended award. If the OFFEROR does not submit a Proposal, the OFFEROR shall return the Confidential Information to Mr. Peter Arrey, MD Department of Transportation on or before the due date for Proposals.
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 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 for the OFFEROR’S failure to comply with the requirements of this Agreement. The OFFEROR consents to personal jurisdiction in the Maryland State Courts.
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. This Agreement shall be governed by the laws of the State of Maryland.
7. OFFEROR acknowledges that pursuant to Section 11-205.1 of the State Finance and Procurement Article of the Annotated Code of Maryland, a person may not willfully make a false or fraudulent statement or representation of a material fact in connection with a procurement contract. Persons making such statements are guilty of a felony and on conviction subject to a fine of not more than \$20,000 and/or imprisonment not exceeding 5 years or both. OFFEROR further acknowledges that this Agreement is a statement made in connection with a procurement contract.
8. The individual signing below warrants and represents that they are fully authorized to bind the OFFEROR to the terms and conditions specified in this Agreement. If signed below by an individual employee or agent of the OFFEROR under Section 2 of this Agreement, such individual acknowledges that a failure to comply with the requirements specified in this Agreement may result in personal liability.

OFFEROR: _____ BY: _____
NAME: _____ TITLE: _____
ADDRESS: _____

SUBMIT AS REQUIRED IN SECTION 1.6 OF THE TORFP

ATTACHMENT 11 – NON-DISCLOSURE AGREEMENT (TO CONTRACTOR)

THIS NON-DISCLOSURE AGREEMENT (“Agreement”) is made as of this ___ day of _____, 200___, by and between the State of Maryland (“the State”), acting by and through its MD Department of Transportation (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 Maximo Implementation and Migration Services TORFP No. J01P9200271 dated January 9, 2008, (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 “Confidential Information”).

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:

1. 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).
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.

TO Contractor/TO Contractor's Personnel:

Name: _____

Title: _____

Date: _____

MD Department of Transportation:

Name: _____

Title: _____

Date: _____

SUBMIT AS REQUIRED IN SECTION 1.6 OF THE TORFP

**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

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EXHIBIT B - MDOT NETWORK ARCHITECTURE OVERVIEW

Introduction

The purpose of this document is to provide a high-level overview of the MDOT data network architecture. This document also provides the end user with the high level description of the interfaces needed to connect to the MDOT network. The information contained in this document is not intended as a stand-alone design document. The first section covers the MDOT Wide Area Network architecture and the second section covers the typical LAN architecture.

The MDOT network architecture provides the bandwidth, network redundancy and QoS necessary to effectively support the communication requirements of MDOT. Bandwidth and redundancy increases as you move from the edge of the network towards the core of the network. All of these mechanisms work in unison to provide reliable IP communication for MDOT. It is the goal of MDOT as an organization to service all of its communication requirements through a single resilient high-speed infrastructure. All future MDOT applications should be designed to utilize the existing network infrastructure. Any augmentations required to the existing infrastructure to support specific applications will be evaluated as directed by application owners.

Network Architecture

The following sections describe the network infrastructure that encompasses the MDOT enterprise data network. The network only provides IP based transport services between MDOT facility locations. The section is divided into Wide Area and Local Area Network specific sections, which provide a brief overview of the basic topologies.

The network has been engineered by technologies and hardware manufactured by Cisco Systems. The existing WAN and LAN transport services hardware is manufactured by Cisco Systems and it is MDOT's intent to maintain this homogeneous infrastructure. Any deviation from the use of Cisco Systems technology and hardware will require a written technical justification supporting the deviation and subsequent written approval from the MDOT OTTS Network Manager.

The MDOT enterprise data network is configured to support end-to-end IP QoS services to prioritize voice, video and various types of data traffic. Application communication flows, which meet the criteria for admittance into the MDOT, defined traffic classes¹ can be presented to MDOT as candidates for the defined QoS services. Applications that require services beyond the capabilities of the defined QoS Policy can submit augmentation requests describing the required augmentations for review by the MDOT OTTS Network Manager.

¹ See MDOT IP Quality of Service Policy (<http://nocportal.noc.mdot.mdstate/>)

MDOT Wide Area Network

The MDOT Wide Area Network (WAN) is responsible for ensuring the various LANs (local area network) within MDOT are able to communicate with one another as well as resources outside the MDOT network. The MDOT WAN is designed in a hierarchical 2-tiered approach consisting of the Backbone, and various transit/edge/access nodes. The MDOT backbone architecture utilizes a combination of fiber optic, Point-to-Point Wireless (both licensed and unlicensed) services, and high-speed leased circuits to create a high capacity and highly redundant backbone. Clear-Channel T1 services the Edge and Access nodes and/or Frame-Relay based services (both leased and state owned microwave provided) as well as a mixture of Ethernet based fiber and Wireless services.

In addition to the MDOT enterprise WAN an extranet service network has been established between 4 selected nodes along the backbone fiber infrastructure. This extranet service network is designed to facilitate the distribution of third party network services. This extranet network supports the secure delivery of Internet, Network Maryland Statewide Government Intranet, and Contractor/3rd party extranet services. Only 2 of the 4 access nodes along the extranet services network are designed to provide intercommunications between the MDOT Enterprise network and the various external networks supported by the MDOT extranet network. These nodes are designated Security Portals and are located at the Glen Burnie and TSO HQ datacenters.

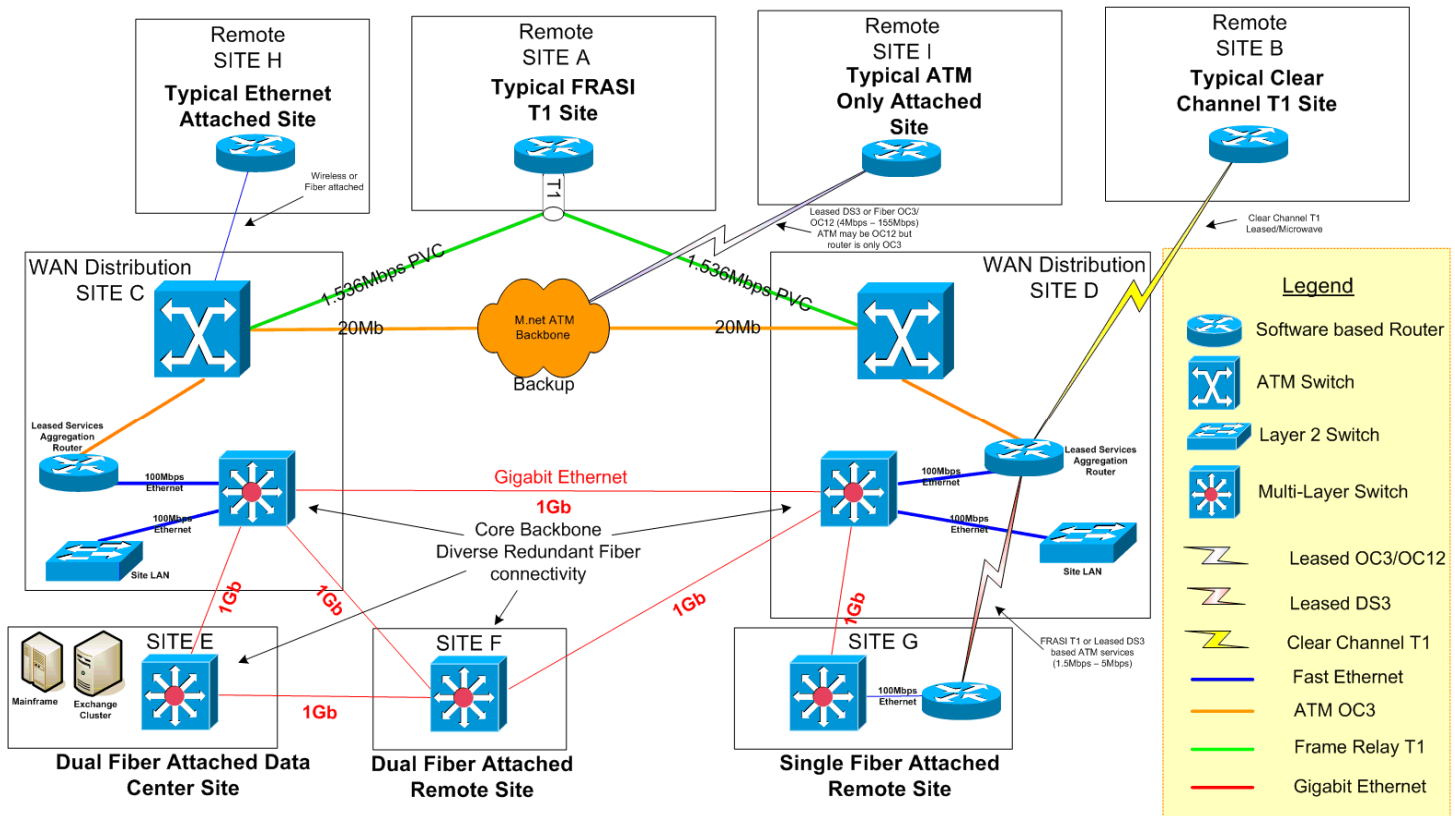


Figure 1 Conceptual Overview of MDOT WAN

Network Backbone

Gigabit Ethernet is the core transport technology utilized to support the MDOT backbone. The backbone utilizes wire-speed Gigabit Ethernet routers (layer 3 switches). The network is configured to utilize OSPF for the distribution of IP Unicast and multicast (in conjunction with PIM sparse-mode) routing information² on the MDOT network. The central Backbone Core (Washington and Baltimore LATA region) is designed in a redundant figure eight topology, which provides resiliency to the backbone through the use of diverse fiber paths between nodes³. The Gigabit Ethernet fiber based backbone also extends into Western Maryland region in a linear fashion. Backbone communications are also augmented by leased ATM based circuit services provided by Network Maryland, the State of Maryland's internal service provider. These services provide high-speed connections into the Eastern LATA as well as provide redundant connections to service the Western LATA. WAN service distribution nodes are collocated with backbone equipment at several locations. These nodes provide a central point of aggregation of leased services for the geographic region they serve.

² See MDOT IP Multicast Design Document (<http://nocportal.noc.mdstate/>)

³ See documentation on OSPF Area 0 on <http://nocportal.noc.mdstate/LANWAN>

Network Edge/Access Nodes

The network overall architecture deployed within MDOT is a partial mesh based design. The design has been driven primarily by availability of high-speed private network services. Many of these Wide Area resources were made available to MDOT through various resource share and joint venture operations with commercial and other state organizations. Due to this, the transport facilities do not lend themselves easily to traditional hierarchical based design methodologies. The resulting network design is a complex partial mesh topology, however the trade off in complexity for high speed cost effective bandwidth is considered highly preferable and has provided MDOT with an infrastructure capable of supporting converged network services with very little capacity concerns.

As stated previously, many access sites are supported through direct fiber based Gigabit Ethernet connectivity to backbone node locations. In addition several sites also leverage State Microwave and non-licensed wireless services to provide backhaul access to the nearest Backbone node. Do to resource limitations, some access sites also serve as transit sites for downstream access nodes. Some site locations utilize private (state owned) wireless based point-to-point transport services for last mile connectivity to a backbone node location.

Access sites without access to privately owned transport services are connected back to regional aggregation sites using leased Frame-Relay or clear-channel T1 services. The services are either provided directly by Verizon or in conjunction with Network Maryland. Typically, each Frame-Relay attached site is provided logical connections to at least two Distribution nodes, which in turn are collocated with backbone node equipment. This design ensures that access sites are not dependant on any single Distribution site.

Extranet Services

The MDOT network also utilizes an ATM based backbone to support extranet services distribution such as Internet and Maryland Statewide Government Intranet (SwGI) access. The ATM backbone utilizes the MDOT fiber backbone resources and has a similar architecture to the CORE Gigabit Ethernet network. MDOT has created 2 datacenter facilities where the required security hardware and services are available to facilitate communication between the extranet services and the enterprise network. Theses datacenters are located at the MDOT OTTS Glen Burnie Campus and the MDOT Headquarters building in Hanover. Each of these locations maintains redundant peering services to Network Maryland, which provides both Internet Access as well as access to the Statewide Government Intranet. These nodes also support access to business partner networks through IPSEC based VPN services.

MDOT Mainframe

MDOT utilizes an IBM 2086-A04 mainframe running z/OS to support many of the MDOT Enterprise applications and some modal specific legacy systems. The Enterprise systems that are supported by the MDOT Mainframe are the Financial Management Information system (FMIS), Employee Management Information System (EMIS) and the MDOT HR System INFOR. The MDOT Mainframe also is the data warehouse for the Motor Vehicle Administration legacy Driver and Registration database, which is extensively used by law enforcement. The MDOT Mainframe environment consists of 4 terabytes of DASD (Direct Access Storage Device), Two StorageTek Tape silos with a capacity of 6000 3490 tapes and a high-speed laser printing system. The database platform for the IBM Mainframe systems is IBM DB2 Version 7.

MDOT LANs

Each MDOT location typically contains a LAN. These LANs range from small networks consisting of a single Ethernet switch to very large networks containing numerous routers, multi-layer (routing) and non multi-layer switches. MDOT is currently deploying POE capable access switches for all new site deployments unless there is no potential use for POE services at the site location.

For the smaller LAN networks, there is typically little to no physical redundancy in the LAN. End stations utilize a single connection to the Ethernet switch and the switch typically has a single connection to the WAN device. In some cases (for fiber attached access nodes) the switch also serves to terminate the WAN services and a separate WAN device is not required. In the event of a failure of the switch, the LAN network will be down. To address this vulnerability, many of the Ethernet switches are connected to Uninterrupted Power Supplies (UPS). Examples of these types of sites include the smaller MVA branch offices.

For the large LAN networks, there are typically several levels of redundancy on the network. Beginning with power, the buildings typically have UPS and generators for backup power. The routing and switching equipment supporting the LAN backbone are configured with redundant power supplies. The larger campus LAN infrastructures are typically designed using the traditional Core/Distribution/Access model. Core and Distribution layers are collapsed for medium sized site LANs. Switching and routing protocols are also utilized to support logical redundancy within the LAN environments. Spanning Tree Protocol is configured to support link redundancy at the data link layer (layer 2) and the OSPF is configured to support redundancy at the network layer (layer 3).

MDOT Sites	WAN Connection Type	Bandwidth	Site Type
MVA/OTTS			
Glen Burnie	Gig Ethernet	1000M	E

MVA Branch Offices

Baltimore Lata

Ordnance Rd VEIP	T1 Frame Relay	1.5M	A
Ordnance Rd	T1 Frame Relay	1.5M	A
Annapolis	T1 Frame Relay	1.5M	A
BaltCity	T1 Frame Relay	1.5M	A
Belair	T1 Frame Relay	1.5M	A
Bay Meadows	T1 Frame Relay	1.5M	A
Bladeslane	T1 Frame Relay	1.5M	A
Columbia	T1 Frame Relay	1.5M	A
Elkton	T1 Frame Relay	1.5M	A
Essex	T1 Frame Relay	1.5M	A
Prince Frederick	T1 Frame Relay	1.5M	A
Towson	T1 Frame Relay	1.5M	A
Westminster	T1 Frame Relay	1.5M	A
Garage	T1 Clear Channel	1.5M	B

Washington Lata

Beltsville	T1 Frame Relay	1.5M	A
Gaithersburg	Gig Ethernet	1.5M	A
Waldorf	T1 Frame Relay	1000M	A
Love	T1 Frame Relay	1.5M	A
Glenmont	T1 Frame Relay	1.5M	A
Walhill	T1 Frame Relay	1.5M	A

Eastern Lata

Salisbury	T1 Frame Relay	1.5M	A
Easton	T1 Frame Relay	1.5M	A

Western Lata

Hagerstown	Gig Ethernet	1000M	A
Frederick	Gig Ethernet	1000M	A
Cumberland	T1 Frame Relay	1.5M	A
Oakland	T1 Frame Relay	1.5M	A

TSO

MDOT HQ	Gig Ethernet	1000M	E
---------	--------------	-------	---

MAA

BWI Main Terminal	Gig Ethernet	1000M	F
Airport Square	T1 Frame Relay	1.5M	A
MAC Building	Gig Fiber	1000M	F
Martin State Airport	T1 Frame Relay	1.5M	A
Parsons	T1 Frasi	1.5M	A
Hock Building	ATM/OC3	155M	I

MDOT Sites	WAN Connection Type	Bandwidth	Site Type
MTA			
Monroe Street	T1 Frame Relay	1.5M	A
St Paul Street HQ	Gig Ethernet	1000M	F
Wabash Ave. Heavy Rail Div	Gig Ethernet	1000M	A
Washington Blvd	Gig Ethernet	1.5M	G
Cromwell	Gig Ethernet	1.5M	A
MARC	T1 Frame Relay	1.5M	A
Park	T1 Frame Relay	1.5M	A
Eutaw	T1 Frame Relay	1.5M	A

North Ave	Gig Ethernet	1.5M	A
Nwest	T1 Frame Relay	1.5M	A
East	Gig Ethernet	1.5M	A
Metro Drive	T1 Frame Relay	1.5M	A
Kirk	T1 Frame Relay	1.5M	A

SHA

HQ	Gig Ethernet	1000M	G
----	--------------	-------	---

District 1

Snow hill	T1 Frame Relay	1.5M	A
Cambridge	T1 Frame Relay	1.5M	A
Pranne	T1 Frame Relay	1.5M	A
Salisbury	ATM/DS3	8M	A

District 2

Centreville	T1 Frame Relay	1.5M	A
Denton	T1 Frame Relay	1.5M	A
Easton	T1 Frame Relay	1.5M	A
Eastern Regional Lab (ERL)	T1 Frame Relay	1.5M	A
Chestertown	T1 Frame Relay	1.5M	A

District 3

Gaithersburg	Gig Ethernet	1000M	A
Laurel	T1 Clear Channel	1.5M	A
Fairland	T1 Clear Channel	1.5M	A
Marlboro	T1 Clear Channel	1.5M	A
Leonard	T1 Frame Relay	1.5M	A
LaPlata	T1 Frame Relay	1.5M	A
Greenbelt	Gig Ethernet	1000M	

District 4

West Friendship	T1 Frame Relay	1.5M	A
Westminster	T1 Frame Relay	1.5M	A
Golden Ring	T1 Clear Channel	1.5M	A
Elkton	T1 Frame Relay	1.5M	A
Churchville	T1 Frame Relay	1.5M	A
Owings Mills	T1 Clear Channel	1.5M	A
Hereford	T1 Clear Channel	1.5M	A
Radio Shop	Gig Ethernet	1000M	F
Brooklandville	Gig Ethernet	1000M	I

MDOT Sites	WAN Connection Type	Bandwidth	Site Type
-------------------	----------------------------	------------------	------------------

District 5

Hanover State Highway Ops Center (HANSOC)	Gig Ethernet	1000M	
Prince Fredrick	T1/Clear Channel	1.5M	A
Glen Burnie	Gig Ethernet	1000M	A
Dayton	T1 Clear Channel	1.5M	A
Annapolis	Gig Ethernet	1000M	I

District 6

Thurmont	T1 Frame Relay	1.5M	A
Hancock Western Regional Lab (WRL)	Gig Ethernet	1000M	A
Oakland	T1 Frame Relay	1.5M	A
Hagerstown	Gig Ethernet	1000M	A
Keysers Ridge	Gig Ethernet	1000M	H
Lavale	Gig Ethernet	1000M	A

Frostburg	T1 Frame Relay	1.5M	A
District 7			
Fredrick	T1 Frame Relay	1.5M	G
Lane Police	ATM/DS3	5M	I
Hanover State Highway Ops Center (HANSOC)	Gig Ethernet	1000M	C, D
MPA			
World Trade Center	T1 Frame Relay	1.5M	A
DMT Maintenance Facility (DMTMAINT)	T1 Frame Relay	1.5M	A
Seagirt	T1 Frame Relay	1.5M	A
DMT Dunmar	T1 Frame Relay	1.5M	A
SMT Crane	T1 Clear Channel	1.5M	A
Point Breeze	Micro wave	50M	A
Navis	T1 Clear Channel	1.5M	B
MdTA			
	Gig Ethernet	1000M	F
Baltimore Harbor Tunnel FAIR	Gig Ethernet	1000M	F
Baltimore Harbor Tunnel Admin Bldg	Gig Ethernet	1000M	F
Fort McHenry Tunnel Vent Building	Gig Ethernet	1000M	F
Fort McHenry Tunnel Admin Building	Gig Ethernet	1000M	F
Fort McHenry Tunnel Maintenance Building	Gig Ethernet	1000M	F
i95/i695	Gig Ethernet	1000M	F
John F. Kennedy Maryland State Police	Gig Ethernet	1000M	F
John F. Kennedy I95 Admin Building	Gig Ethernet	1000M	F
John F. Kennedy Maintenance Building 1	Gig Ethernet	1000M	F

John F. Kennedy Maintenance Building 1	Gig Ethernet	1000M	F
John F. Kennedy Lane Police	ATM/DS3	5M	A
Hatem Bridge	Wireless Ethernet	100M	H
Francis Scott Key Bridge	Wireless Ethernet	100M	H
John F. Kennedy Bridge	T1 Frame Relay	1.5M	A
Port Police	T1 Frame Relay	1.5M	A
Point Breeze	Micro wave	50M	A

MDOT Information Security

MDOT utilizes a “defense in depth” approach to assuring the confidentiality, availability, and integrity of their information resources through a combination of management, operational, and technical controls. Best practices and management provide IT governance. This is stated through policies, reiterated through training and through defining processes. Technologies include the use of firewalls, intrusion detection and prevention systems, anti-spam, anti-virus, mail relays, web filtering proxies, patch management systems and services, and others. These measures are routinely assessed through on-going periodic vulnerability assessments.

Third-party access to the MDOT network is strictly controlled and requires permission. When authorized and depending upon the need, remote access is provided by site-to-site IPSEC Virtual Private Network (VPN) connections or through the use of a Cisco remote access client and two-factor authentication.

Acronyms

ATM – ASYNCHRONOUS TRANSFER MODE

DASD – Direct Access Storage Device

EMI – Employee Management Information System

FMIS – Financial Management Information System

IP – Internet Protocol

IPSEC – Internet Protocol Security

LAN – Local Area Network

LATA – Local Access and Transport Area

MVA – Motor Vehicle Administration

MDOT - Maryland Department of Transportation
OTTS – Office of Transportation Technology Services
OSPF – Open Shortest Path First
PoE – Power Over Ethernet
Qos – Quality of Service
SwGI – State Wide Government Intranet
TSO – Transportation Secretary Office
UPS – Uninterrupted Power Supply
VPN – Virtual Private Network
WAN - Wide Area Network

EXHIBIT C – MDOT’S MAXIMO ENVIRONMENT OVERVIEW

MDOT – MAXIMO INFRASTRUCTURE

