

**MICHIGAN  
CHILD SUPPORT  
ENFORCEMENT SYSTEM  
(MICSES)**

**INDEPENDENT  
VERIFICATION & VALIDATION  
ASSESSMENT REVIEW**



**U.S. Department of Health and Human Services  
Administration for Children and Families  
Office of Child Support Enforcement**

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## EXECUTIVE SUMMARY

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As a result of missing the October 1, 1997 deadline for achieving statewide installation and operation of a comprehensive automated Child Support Enforcement System (CSES) meeting all of the requirements of the Family Support Act of 1988 (FSA88), the Michigan Child Support Enforcement System (MICSES) project became subject to mandatory provisions of Federal regulations at 45 CFR 307.15(b)(10). These provisions require an entity independent of the State Title IV-D agency and of the MICSES project management structure to perform Independent Verification and Validation (IV&V) of the MICSES project. The Administration for Children and Families (ACF) has the authority under Action Transmittal OCSE-AT-98-26 to grant very limited exceptions to allow a State agency independent of the child support agency and its development project to provide these IV&V services. A preliminary IV&V assessment of the MICSES project was conducted by the Federal Office of Child Support Enforcement (OCSE) on July 26-28, 1999. The purpose of the assessment was to determine the extent of IV&V services required on the MICSES project. This report presents the findings of our assessment review.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

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### SCOPE OF REQUIRED IV&V SERVICES

**The State must move to immediately acquire IV&V services for the MICSES development project.** The IV&V provider who supplies these services shall review and make recommendations on the following areas of the MICSES development process as described in Section 3 of this report:

- Project Planning, Estimating and Personnel
- Quality Assurance
- Configuration Management
- Requirements Management
- System Capacity

**IV&V services will be required until such time that Michigan successfully implements and receives Federal certification of MICSES for all requirements of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA),** as delineated in this report. The acquisition of this *IV&V Service Provider*, either through a formal procurement of contract resources or Interagency Cooperative Agreement, will need to commence immediately. To assist the State in this regard, this report's recommendations are structured to present specific IV&V tasks that can be included in the Statement of Work of an IV&V Service Provider. **The IV&V Service Provider must supply all plans, reports of findings, and recommendations to ACF Central and Regional Offices at the same time that they are supplied to the State, as specified in 45 CFR 307.15(b)(10)(ii).**

## IV&V SERVICE PROVIDER

**The State must move to begin the identification of requirements for and formulation of a Scope of Work for ongoing IV&V services to the State's MICSES project.** It is incumbent on the State to begin the acquisition process for these services now to avoid further schedule delays. Therefore, the State should immediately pursue the identification of potential in-State IV&V resources. If these resources, independent of the State's Title IV-D and its umbrella agency, cannot be identified then a contract procurement effort must be initiated. This report has been designed to provide the State with a series of initial recommendations that can be incorporated into a Scope of Work for the project's IV&V Service Provider. To further support the State's IV&V process, OCSE is committed to providing the State with technical assistance in the form of documentation review and recommendations, as needed, to assist the State in the acquisition/ procurement of an IV&V Service Provider.

## PRIOR APPROVAL

The Request for Proposals (RFP) and contract (or similar documents if IV&V is performed by another State agency) must be submitted to ACF for prior approval, regardless of the cost or contractual arrangements. The IV&V services contract or agreement with a State agency must include the names and qualifications of key personnel who will actually perform the IV&V services. **For all IV&V activities, the State must submit an Advanced Planning Document Update (APDU) addressing in sufficient detail the IV&V activities and related costs eligible for Federal financial participation (FFP) at the applicable matching rate.**

## IV&V DURATION

**IV&V must be performed at initial activation of the IV&V Service Provider contract or State agency agreement. Thereafter, the IV&V services must be performed semi-annually until such time that Michigan successfully implements and receives Federal certification of MICSES for all PRWORA requirements.** ACF will periodically reevaluate the IV&V scope of work and frequency requirements of MICSES based upon project progress or when one or more of the IV&V triggers occurs, as described in 45 CFR 307.15(b)(10)(i), such as failure to meet a critical Advanced Planning Document (APD) milestone.

# INDEPENDENT VERIFICATION AND VALIDATION (IV&V) ASSESSMENT REVIEW REPORT FOR THE MICHIGAN MICSES PROJECT

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## 1. INTRODUCTION

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The State of Michigan missed the October 1, 1997 deadline for achieving Federal certification for system modification to meet the requirements of the Family Support Act of 1988 (FSA88). ACF, as a result, conducted an IV&V Assessment Review including an assessment of the current documentation of the MICSES system, as well as historical data on the project. The purpose of the assessment was to enable ACF to make recommendations on the extent of the IV&V services that the State will be required to obtain. This report provides the results of that assessment.

### 1.1 BACKGROUND

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ACF conducted a site visit to help determine the required scope of IV&V for MICSES on July 26-28, 1999 at the MICSES development office in Lansing, Michigan. The IV&V assessment team consisted of:

Ron Logan	ACF/OCSE/DCSIS
Eric Staples	ACF/Region V
Stan Slominski	BAE SYSTEMS

Personnel from the Michigan Family Independence Agency (FIA), Department of Management and Budget (DMB) and contractor staff participated for the State. The State and MICSES contractor (\*) representatives consisted of:

Virginia Hambric	FIA/MICSES Project Director
James Fricke	FIA/MICSES Deputy Director
Kathy Jordan	FIA/MICSES Administrative Compliance Coordinator
Geoff Ruonavaara	FIA/MICSES Customer Services Manager
Kathy St. Divine	FIA/MICSES Materials Management Team Leader
Tess Layman	DMB/MICSES Data Center Manager
* Carl Blanchette	RGS/MICSES Business Analyst
* Jan Grinnell	RGS/MICSES Testing Manager
* Toni Schaney	RGS/MICSES QA Project Manager
* Keith Bollwhan	Vendor Staff/Materials Management Team
* Bradley Olsen	Vendor Staff/Local 1.4.1 Manager

## 1.2 METHODOLOGY

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Prior to the assessment review a list of IV&V related materials and questions were forwarded to the MICSES Deputy Director, Mr. James Fricke, to assist MICSES project staff in understanding the types of items and information the IV&V assessment team would be looking at during its visit. The assessment consisted primarily of a presentation by the State with a question and answer period for each of the following major areas of interest: project management, project personnel, subcontractors and external staff, training and documentation, process definition and product standards, quality assurance, configuration management, requirements management, system security and system capacity. State staff provided more detailed information on these primary areas during the discussions.

A list of documentation and historical data needed to support areas of discussion during and after the review was generated, finalized and agreed to by the State and IV&V assessment team during the on-site review. This list of documents, to be forwarded to the Office of Child Support Enforcement (OCSE), in hardcopy format or on Compact Disk (CD) for examination, is identified in Table 1. MICSES Documents Reviewed. Recommendations resulting from the on-site visit and subsequent analyses of all forwarded documentation is included in Section 3 of this report.

**Table 1. MICSES Documents Reviewed**

No.	Document Description	Originator	Document Date	Date Provided	IV&V Reqmt
1	MICSES IV&V Workbook Preliminary Assessment Presentation Notebooks (3 copies) and CDs (2 copies)	MICSES	July 26-28, 1999	8/2/99	All
2	CSES Resume Notebook	MICSES	None	8/2/99	1.5
3	Oracle Contracts	MICSES	None	8/2/99	2.2.1
4	Interagency Agreements (2) between: <ul style="list-style-type: none"> <li>• FIA and Department of Corrections</li> <li>• FIA and Department of Natural Resources (DNR)</li> </ul>	MICSES/ Corrections/ DNR	7/98 11/13/98	8/2/99	4.2
5	Completed Conversion Checklist for Lenawee County	MICSES	5/27/98	8/2/99	6.2

## 2. FINDINGS

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The findings in this report are based on the discussions held with State and MICSES contractor staff during the site visit on July 26-28, 1999 and upon review of the MICSES documentation. This report intentionally does not assess past performance except where applicable to current project status. The focus of this report is on what needs to be accomplished by the State to ensure future project success.

### 2.1 PROJECT PLANNING, ESTIMATING AND PERSONNEL

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#### **Planning:**

The Child Support Enforcement System (CSES) Master Project Plan (MPP) currently represents a summary roll-up of 16 individual project plans maintained by individual CSES Product Managers. Individual project plans are maintained using Microsoft Project while the CSES Master Project Plan is compiled manually. A central electronic file was established to assist with the coordination of MICSES project plan information. Electronic folders were established for Detailed Product Plan Locations (introduced 05/13/99), Master Project Plan historical data (produced 04/29/99 forward) and Summary Project Plans. The State indicated in its documentation<sup>1</sup> that utilization of these folders is optional for Product Managers and had “met with varying degrees of success” at the time of the IV&V review. The intent of the Master Project Plan is to provide a historical reference of current and past CSES Master Project Plans. It is understood that historical data collection of project planning is a newly implemented feature for MICSES. This feature did not exist prior to 04/29/99.

#### **Risk Management:**

Risk management planning is essential for all software development efforts. It is especially critical for State CSES projects that have missed the October 1, 1997, deadline for achieving statewide installation and operation of a comprehensive automated CSES as required by the Family Support Act of 1988. MICSES Project Director and Deputy Director have attended a Risk Management Workshop sponsored by the State Information Technology Consortium (SITC). The State provided sample documentation (Centralized Collection Project Review and Reporting of Risks) of its risk management strategy to identify, assess and develop a plan to mitigate project risks to successfully implement the Child Support Centralized Collections task. It is unclear what the State’s overall risk management strategy/plan is to identify, categorize, analyze, and mitigate all MICSES project risks.

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<sup>1</sup> CSES Master Project Plan Orientation, Page 4, Paragraph 8.

### **Estimating:**

The State provided evidence to demonstrate the use of estimates, planning, and scheduling during MICSES development (Product Development Estimating Spreadsheet, Sample Estimate Using Estimating Spreadsheet, and Documentation Estimating Spreadsheet). The Product Development Estimating Spreadsheet document provided is a model/template, without any basis for the estimated hours using historical data. There is also no historical data to determine how accurate estimates were as MICSES development has progressed.

### **Personnel:**

The State indicated that it is challenged to find programmers that know CorVision, the MICSES legacy programming language. As identified in a MAXIMUS report of August 1996<sup>2</sup>, CorVision is not state of the art, the entire CSES application at the time was written in CorVision, placing the CSES at risk if the CorVision vendor discontinues support of the product. The project has provided in-house training and mentoring to assist programmers in acquiring CorVision skills. At the time of the IV&V Assessment Review the State was in the midst of a skill assessment process to determine those skills lacking and the requisite training required as Michigan migrates towards the High Volume Assessment (HVA) application.

## **2.2 QUALITY ASSURANCE**

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The MICSES project has instituted formal Quality Assurance (QA) since January 1998. This was accomplished in response to a recommendation in the MAXIMUS report of August 1996<sup>3</sup>, indicating that “A quality assurance monitor is recommended to assist the State in managing the contracts, ensuring quality of deliverables and adherence to schedule.” The State provided QA planning documentation (MICSES Project Management Procedures (PMP) Project Control Document (PCD), dated July 17, 1999) as part of its IV&V documentation review package. The PMP/PCD is intended to be a master plan to define the strategy, deliverables, organization, plans, processes and procedures for the MICSES Quality Assurance (QA) Project. The following observations were noted during the review of this documentation:

- Sixteen months had elapsed (2/20/98 to 7/1/99) since the last update of the PCD just prior to the MICSES IV&V review. More frequent updates were expected since this is to be a living document, updated and added to as the project progressed and task or schedule changes occur (per PCD002, page 3-17);
- The detailed Master Project Plan (MPP) [PCD002, Addendum 2] was missing. The MPP is required to be updated monthly (per PCD002, page 5-27);
- The Task and Deliverable Description and Approach Narrative was missing for a majority of the deliverables listed in Table 4.2;

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<sup>2</sup> MAXIMUS deliverable #4, dated August 1996, CSES Environment and Supporting Organizational Structure Assessment Final Report

<sup>3</sup> Ibid., ES-10



- The Detailed Work Plan (showing task assignments, responsibilities, person-hours, and time frame for completion), Milestone and GANTT Charts were missing;

## 2.3 CONFIGURATION MANAGEMENT

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The MICSES Project does not have a formal/documented Configuration Management (CM) Plan. The CSES Datacenter Master Project Plan provided in the States IV&V review response **does not qualify as a software CM plan**. Per IV&V review discussions, the MICSES project had recently started to implement a “documentation librarian” to monitor changes and updates to master documents. Code changes are monitored by team leaders as the CM function.

## 2.4 REQUIREMENTS MANAGEMENT

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Prior to Release 1.4.1 (8/98 – 10/99), the MICSES project had no reliable and available history of requirements traceability. Beginning with Release 1.4.1 MICSES design documents tie back to requirements documents on which the design was based. The project is in the process of adopting the use of Requisite Pro software to trace software requirements throughout the life-cycle of the project (including design, code and test phases). It is the intent of the project to use this software to help unify, simplify and optimize the MICSES software development process. The software will also assist in the requirements management by organizing the collection, documentation, verification, and modification of the business objectives for the software system.

It is unclear to the IV&V review team how the project can verify that all MICSES system requirements are allocated to either a software (SW) or hardware (HW) subsystem. A formal, CM controlled, requirements allocation document or other comparable document was not available from the project to demonstrate how MICSES requirements are allocated to the key SW/HW components of Michigan’s statewide CSES that were identified in the State’s response [i.e., the Legacy Application, Data Warehouse, Interstate Central Registry, State Disbursement Unit (SDU) and the end portion of the High Volume Assessment (HVA) efforts].

## 2.5 SYSTEM CAPACITY

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The MICSES project has little or no historical data/evidence on the reliability of the system (e.g., mean time between failure or percent time operating). Project personnel indicated that the local and central application servers have been very reliable. All calls to the Help Desk, reporting system interruptions, are logged and tracked. However, the project is looking to the new Help Desk software (Remedy) to provide more detailed project statistical data on system reliability in the future.

### 3. RECOMMENDATIONS

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The following recommendations are presented herein based upon the on-site review by the IV&V assessment team on July 26-28, 1999, and analyses of the State's MICSES project documentation following the on-site portion of the review.

#### 3.1 INDEPENDENT VERIFICATION AND VALIDATION

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The State must acquire Independent Verification and Validation (IV&V) services in accordance with 45 CFR 307.15(b)(10). These services can be obtained from a contractor via an RFP or from an independent State agency. If a contractor is used, the RFP and contract must be submitted to ACF for prior approval, regardless of the cost or thresholds. The contract must include the names, experience, and skills of key personnel who will actually perform the IV&V analyses. If IV&V is performed by another State agency, similar, equivalent documentation must be submitted, usually taking the form of a detailed Interagency Cooperative Agreement. **The State must then submit an Advance Planning Document Update (APDU) describing in sufficient detail, the prescribed IV&V activities, work products, and costs eligible for Federal financial participation.**<sup>4</sup>

This IV&V activity should describe the level of IV&V services to be provided, consisting of an initial review at contract (or State agency agreement) activation and semi-annual reviews to monitor the overall status and management of the project's development effort. Many aspects of this level of IV&V services are briefly described below, and will be further defined by the State and its *IV&V Service Provider*. **The IV&V Service Provider must supply all plans, reports of findings, and recommendations to ACF Central and Regional Offices at the same time that they are supplied to the State (including draft documents submitted for comment), as specified in 45 CFR 307.15(b)(10)(ii).**

#### INITIAL AND SEMI-ANNUAL IV&V REVIEWS

An initial (at contract or State agency agreement activation) and semi-annual IV&V reviews shall be required to ensure the project is on schedule and requirements are being met for Federal certification. The frequency and task level of these reviews will be defined in the IV&V Management Plan submissions discussed in Section 3.2, as appropriate. The initial and semi-annual reviews will require the IV&V Service Provider to assess system development in areas including, but not limited to, the following:

- a) Analyze project management and organization, evaluate project progress, resources, budget, schedules, work flow and reporting.
- b) Assess and recommend improvement, as needed, to assure lines of communication between project staff and State management are in place and engaged.

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<sup>4</sup> IV&V services are eligible for reimbursement at the regular (66 percent) rate of Federal financial participation.

- c) Review and analyze project management planning documents.
- d) Review and analyze project software development documents.
- e) Review and analyze QA, CM and RM processes to ensure they are being documented, carried out, and analyzed for improvement.
- f) Assess the project's CM function/organization by reviewing its reports and making recommendations regarding appropriate processes and tools to manage system changes.
- g) Monitor the performance of the QA function/organization by reviewing its reports and performing spot checks of system documentation.
- h) Assess the project's risk management plan and make recommendations regarding organization, processes, policies, and overall effectiveness of the plan to identify, analyze, and mitigate potential project risks.
- i) Report on the State's efforts to address the findings and recommendations from this IV&V Assessment Review Report.
- j) Review and analyze system capacity studies.

Some of the above tasks may be assigned to the State's QA function/organization. In that case, the IV&V Service Provider would be responsible for ensuring these tasks are being performed through the review of QA products and reports.

The initial and semi-annual IV&V reviews of system development in the following areas are not currently required for the MICSES project. However, the State is advised to select an IV&V Service Provider with the appropriate technical skills and resources available to support such reviews should they become necessary as a result of significant findings during the semi-annual IV&V reviews.

- a) Assess and recommend improvement, as needed, to assure maintenance of a data center, including data center input to the project regarding operational and maintenance performance of the application.
- b) Review system hardware and software configuration and report on any compatibility and obsolescence issues.
- c) Develop performance metrics, which allow tracking of project completion against milestones set by the State.
- d) Assess and recommend improvement, as needed, to assure appropriate user and developer training is planned and carried out.
- e) Assess and recommend improvement, as needed, to assure continuous stakeholder buy-in, support and commitment, and that open pathways of communication exist among all stakeholders.

- f) Assess and recommend improvement, as needed, to assure software testing is being performed adequately through review of test plans or other documentation and through direct observation of testing where appropriate, including participation in and coordination of peer reviews.

### **QUARTERLY MASTER PROJECT PLAN (MPP) UPDATES**

In addition to the initial and semi-annual IV&V reviews identified above, MICSES project management shall also provide directly to this Office a quarterly update status (spreadsheet or other comparable form) on all tasks and subtasks of the MICSES Master Project Plan (MPP). A detailed explanation for all significant changes (e.g. task/sub-task additions, deletions, slips in schedules or staff allocation changes) to tasks/sub-tasks of the MPP shall accompany each quarterly status update along with a mitigation plan to minimize the risk and impact on the ultimate certification success of the MICSES project. This Office reserves the right to require less or more frequent MPP status updates based on the State's progress and adherence to MICSES project plans and schedules.

### **FULL TECHNICAL IV&V REVIEWS**

Full technical (software and hardware) IV&V reviews are not currently required for the MICSES project. However, the State is again advised to select an IV&V Service Provider with the appropriate technical skills and resources available to support such reviews should they become necessary as a result of significant findings during the semi-annual IV&V reviews, such as a need to assess application performance or system capacity issues. These reviews may also be initiated by the State to give it assurance that the project's code base, documentation, etc., is in good shape and to identify and address any problems before they become unmanageable. Full technical IV&V reviews may include, but not be limited to the following areas of review for remediation and elimination of deficiencies:

- a) Perform a detailed review of the system documentation (Requirements, Design, Training, Test, Management Plans, etc.) for accuracy and completeness.
- b) Perform a detailed review of the software architecture for feasibility, consistency, and adherence to industry standards.
- c) Inventory and review the application software for completeness and adherence to programming standards for the project.
- d) Review the traceability of system requirements to design, code, test, and training.
- e) Analyze application, network, hardware and software operating platform performance characteristics relative to expected/anticipated/contractually guaranteed results and industry standards/expectations.

### 3.2 IV&V MANAGEMENT PLAN

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Many of the recommendations contained in this report are presented to the State in the form of general requirements for the State to incorporate into what this report refers to as an *IV&V Management Plan*.<sup>5</sup> These recommendations are intended to assist the State in creating and refining an acquisition/procurement document's Scope of Work for the eventual solicitation of an IV&V Service Provider. If the IV&V Service Provider is to be a State agency, the IV&V Management Plan, incorporating these recommendations, should be jointly constructed as part of an Interagency Cooperative Agreement defining the roles and responsibilities between the Title IV-D agency and the State agency serving as the IV&V Service Provider. OCSE is committed to providing technical assistance in the form of documentation review and recommendations, as needed, to assist the State in the development of its Interagency Cooperative Agreement or Statement of Work for the acquisition of the IV&V Service Provider.

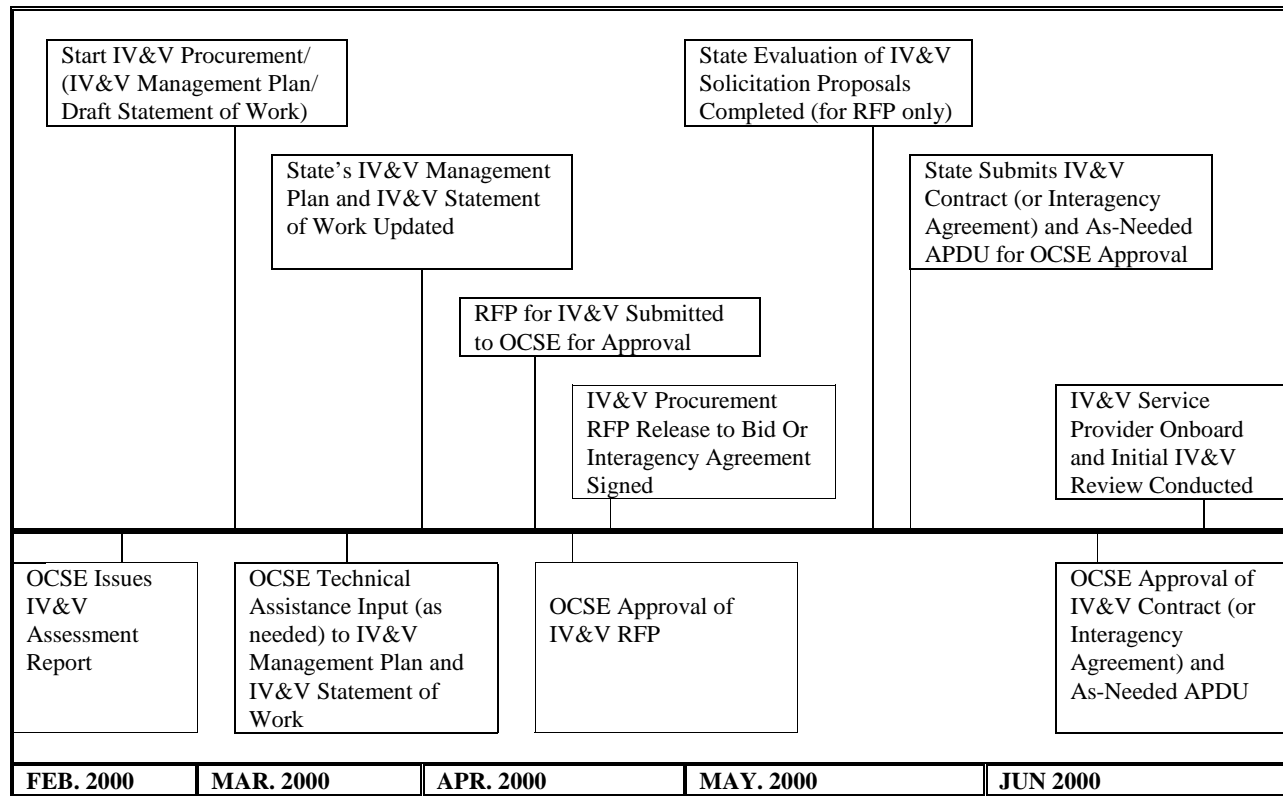
Figure 1. Estimated Critical Milestones Schedule in MICSES IV&V Procurement, below presents an estimated timeline presenting what we believe represents an appropriate order for the major milestones in the MICSES IV&V procurement phase, from issuance of this report through to the IV&V Service Provider being brought aboard to completion of the IV&V Management Plan. The State should consider this estimated timeline as it develops its initial IV&V Management Plan and subsequent update to the State's Annual APDU. As the State develops a more accurate critical milestone schedule for procurement of IV&V services, caution should be exercised to assure consistency with Michigan's procurement processes and timeframes. If an expedited procurement process is an option for the State, then such an expedited process should be seriously considered for the MICSES IV&V procurement. The State's APD will need to incorporate the requirements and activities of the IV&V Service Provider's proposal and IV&V Management Plan.

ACF will periodically reevaluate the IV&V scope of work and frequency for MICSES based on project progress or when one or more IV&V triggers occur, as described in 45 CFR 307.15(b)(10)(i), such as failure to meet a critical Advanced Planning Document (APD) milestone."

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<sup>5</sup> The need for an IV&V Management Plan, beyond its use as a basis for a Scope of Work for an IV&V Service Provider (whether contract or State agency) is as a detailed plan of action for periodic independent reviews of the MICSES project's critical development and implementation phase milestones and deliverables. In addition, it serves as vital documentation to the State's required As-Needed Advance Planning Document Update.

**Figure 1. Estimated Critical Milestones Schedule in MICSES IV&V Procurement**



### 3.3 PROJECT PLANNING, ESTIMATING AND PERSONNEL

Michigan's MICSES management and staff are highly motivated to prepare for and request a Federal FSA88 certification review for MICSES by September 30, 2001.

#### **Planning:**

The MICSES project is a large and extremely complex development effort (16 individual project plans). Historical data collection of project planning is a newly implemented feature for MICSES (04/29/99 forward) and the project is having varying degrees of success with the use of electronic folders for project planning. It would seem prudent for the project to evaluate consolidating the individual Microsoft Project plans into a single MICSES Master Project Plan (MPP) file, with update responsibility for the individual portions of this MPP remaining with the currently assigned Product Managers. This would expedite the roll-up process without having to compile the MPP manually, ensure the utilization of a management-mandated MPP, and continue to ensure real-time upper management review/statusing of all MICSES planning efforts.

The IV&V Service Provider shall:

- Evaluate all project planning and reporting, including all individual Project Plans and make recommendations regarding the feasibility of such plans;
- Evaluate the MPP and actual project reports to ensure that project status is accurately tracked and make recommendations if project tracking inaccuracies are determined;
- Ensure that appropriate cost-benefit analyses and feasibility studies are performed for the project, when required;
- Evaluate the system's planned life-cycle development methodology to see if it continues to be appropriate for the system being developed and make recommendation as appropriate;
- Ensure that State staff has responsibility for monitoring project cost and schedule; and
- Determine if appropriate development milestones and completion dates are planned, monitored and met, and make recommendations for corrective actions, as required.

### **Risk Management:**

The State must expand the risk strategy outlined in the Centralized Collections documentation to encompass all project tasks to determine the overall project risk status and then measure the progress of project risk mitigation efforts.

The IV&V Service Provider shall:

- Evaluate the overall MICSES risk management strategy/plan and make recommendations regarding organization, processes, products, policies, and overall effectiveness of the plan to identify, analyze and mitigate potential project risks; and
- Evaluate and make recommendation on whether appropriate mechanisms are in place for project self-evaluation and process improvement.

### **Estimating:**

The project must take the necessary steps to collect and utilize useful historical data in determining the accuracy of task work estimates for the remaining tasks associated with the Family Support Act of 1988 (FSA88) and Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) requirements.

The IV&V Service Provider shall:

- Evaluate and make recommendations on the estimating and scheduling process of the project to ensure that the project budget and resources are adequate for the work-breakdown structure and schedule;
- Review schedules to ensure adequate time and resources are assigned for planning, development, review, testing and rework; and
- Look at historical data to determine if the project/department has been able to accurately estimate the time, labor and cost of software development efforts.

## **Personnel:**

The State must continue to make every effort to locate and recruit programmers that know CorVision and to develop a mitigation/migration plan for the very real risk of the CorVision vendor discontinuing support for the CorVision product in the future.

The IV&V Service Provider shall:

- Examine the job assignments, skills, training and experience of the personnel involved in program development to ensure they are adequate for the development task;
- Evaluate the State's hiring plan for the project to ensure that adequate human resources will be available for development and maintenance;
- Evaluate the State's personnel policies to ensure that staff turnover will be minimized; and
- Evaluate the project's mitigation/migration plan for the potential discontinuance of product support by the CorVision vendor and make recommendations for improvement, as required.

## **3.4 QUALITY ASSURANCE**

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The State must ensure that the independent Quality Assurance (QA) organization continues to monitor the fidelity of all defined processes in all phases of the MICSES project. The State must also ensure that the Product Control Document (PCD) is a living document, continuously updated and added to as the project progresses and task or schedule changes occur. The State must ensure that the missing Master Project Plan (MPP); Task and Deliverable Descriptions and Approach Narratives; and Detailed Work Plan, Milestone and GANTT Charts are included in future updated versions of the PCD.

The IV&V Service Provider should:

- Evaluate and make recommendations on the project's QA plan, procedures and organization;
- Evaluate the QA organization to verify that the organization continues to have an appropriate level of independence from project management, and that the QA organization appropriately monitors the fidelity of all defined processes in all phases of the project; and
- Provide recommendations to ensure that formal review and sign-off processes are used to monitor the quality of all products produced by the project, including the use of periodic self-evaluations to support process improvement.



### 3.5 CONFIGURATION MANAGEMENT

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The State must ensure that a formal Configuration Management (CM) plan and associated procedures are developed and implemented for the MICSES project. The State should continue in its implementation of a tool, such as the indicated “documentation librarian” software, to monitor changes and updates to all MICSES master documents.

The IV&V Service Provider shall:

- Review and evaluate the CM plan and procedures associated with the MICSES development process;
- Make recommendations to manage and ensure that all critical development documents, including but not limited to those associated with requirements definition, design, code, test, etc., are developed and maintained under an appropriate level of configuration control; and
- Review the use of CM information (such as the number and type of corrective maintenance actions over time) by project management for trend analysis or other appropriate management indicators.

### 3.6 REQUIREMENTS MANAGEMENT

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The project must continue in the process of adopting the use of Requisite Pro software to trace software requirements throughout the life-cycle of the project (including design, code and test phases). The State must verify that all MICSES system requirements are allocated to either a software (SW) or hardware (HW) subsystem. The project must produce/develop a formal, Configuration Control (CM) controlled, requirements allocation document or other comparable document as evidence of the MICSES requirements being allocated to each of the key SW and HW components of Michigan’s statewide CSES identified in the State’s response [i.e. the Legacy Application, Data Warehouse, Interstate Central Registry, SDU (Central Collections) and the end portion of the High Volume Assessment (HVA) efforts].

The IV&V Service Provider shall:

- Evaluate and make recommendations on the project’s process and procedures for managing requirements;
- Ensure the system requirements are well defined and understood;
- Verify that all software requirements are allocated either to a software or hardware subsystem and can be traced (backward and forward) through the design, code and test phases to ensure that the system performs as intended and contains no unnecessary software elements;
- For those areas where weaknesses are identified, the IV&V Service Provider shall provide detailed recommendations for improvement. These recommendations shall, at a minimum and as required, include such aspects as organizational control, resources, and process models; and
- Verify that MICSES requirements are under formal CM.

### **3.7 SYSTEM CAPACITY**

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The project must evaluate and determine if the new Help Desk software (Remedy) provides the required detailed project statistical data on system reliability for the future.

The IV&V Service Provider shall evaluate the historic availability and reliability of the MICSES including the frequency and criticality of system failure and make suggestions for improvements where required. The IV&V Service Provider shall also evaluate the data inputs and outputs against the project's defined statistical data requirements and make recommendations for improved use, application, as appropriate.

## APPENDIX A: ACRONYMS

ACF	Administration for Children and Families
APD	Advanced Planning Document
APDU	Advanced Planning Document Update
CD	Compact Disk
CFR	Code of Federal Regulations
CM	Configuration Management
CSE	Child Support Enforcement
CSEA	Child Support Enforcement Agency
CSSES	Child Support Enforcement System
DCSIS	Division of Child Support Information Systems
DMB	Department of Management and Budget
DNR	Department of Natural Resources
FIA	Family Independence Agency
FFP	Federal Financial Participation
FSA88	Family Support Act of 1988
HVA	High Volume Assessment
HW	Hardware
IV&V	Independent Verification and Validation
MI	Michigan
MICSES	Michigan Support Enforcement Tracking System
MPP	Master project Plan
NA	Not Applicable
OCSE	Office of Child Support Enforcement
PCD	Project Control Document
PMP	Project Management Procedures
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act
QA	Quality Assurance
RFP	Request for Proposals
RGS	Renaissance Government Solutions
RM	Requirements Management
SDU	State Disbursement Unit
SITC	State Information Technology Consortium
SW	Software