

**CONTRACT #15**  
**RFS # 343.52-12615**  
**Edison # NA**

**Department of Health**  
**Office of the Chief Medical**  
**Examiner**

**VENDOR:**  
**ICRA Sapphire, Inc.**



**STATE OF TENNESSEE**  
**DEPARTMENT OF HEALTH**

JOHN J. DREYZEHNER, MD, MPH  
COMMISSIONER

BILL HASLAM  
GOVERNOR

May 19, 2014

Mr. Lucian Geise, Director  
Fiscal Review Committee  
320 Sixth Avenue North, 8<sup>th</sup> Floor  
Nashville, TN 37243

Mr. Mike Perry, Chief Procurement Office  
Department of General Services  
Tennessee Tower, Third Floor  
Nashville, TN 37243

Dear Director Geise and CPO Perry,

This request is for approval to execute a contract with ICRA Sapphire, Inc. (RFS # 34352-12615) for installation, customization and maintenance of the Unified Victim Identification System – Daily Case Management System (UVIS-CMS) software. UVIS-CMS is free with a licensing agreement through the New York City Office of the Chief Medical Examiner. UVIS-CMS is currently being used by the city of New York and the state of New Jersey, as well as several other offices across the globe. Only UVIS-CMS meets all of the current data management, analysis and practical work-flow needs that the Tennessee Department of Health Office of the Chief Medical Examiner has for uniform death investigation and reporting as required by TCA 38-7-201(d)(3). This is a sole source contract request because ICRA Sapphire, Inc. is the only vendor that provides maintenance and support services for the UVIS-CMS system. This contract request is for a term of five (5) years with a total liability of \$1, 347,290. The UVIS-CMS systems will:

- Provide a centralized source for all 95 counties to document all reportable deaths (including chain of custody), scene investigation, and external examination and autopsy findings.
- Provide uniform investigation protocols and reporting tailored to the needs of Tennessee.
- Automatic decedent/evidence/personal effect tracking for statewide consistency.
- Enable electronic exchange of relevant information to other investigative agencies (child fatalities, mass fatalities, substance abuse trend).

Mr. Lucian Geise  
Mr. Mike Perry  
May 19, 2014  
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- Integrate and manage missing persons and victim information for disaster victim management.
- Enable the production of an annual report on death investigations in the state as required by TCA 38-7-201(d)(3).

We appreciate your consideration of our request for approval to proceed with this non-competitive contract request.

Sincerely,

*John J. Dreyzehner, MD, MPH/FACOEM*

John J. Dreyzehner, MD, MPH, FACOEM

Supplemental Documentation Required for  
Fiscal Review Committee

*Contact Name:	Dr. Karen Cline-Parhamovich	*Contact Phone:	423-439-8403		
*Presenter's name(s):	Mike Newman, Dr. Karen Cline-Parhamovich, Eugene Neubert				
Edison Contract Number: <i>(if applicable)</i>		RFS Number: <i>(if applicable)</i>	34352-12615		
*Original or Proposed Contract Begin Date:	7/20/2014	*Current or Proposed End Date:	7/19/2019		
Current Request Amendment Number: <i>(if applicable)</i>					
Proposed Amendment Effective Date: <i>(if applicable)</i>					
*Department Submitting:	Health				
*Division:	Office of the Chief Medical Examiner				
*Date Submitted:	05/16/2014				
*Submitted Within Sixty (60) days:	Yes				
<i>If not, explain:</i>					
*Contract Vendor Name:	ICRA Sapphire, Inc.				
*Current or Proposed Maximum Liability:	\$1,347,290				
*Estimated Total Spend for Commodities:					
<b>*Current or Proposed Contract Allocation by Fiscal Year: (as Shown on Most Current Fully Executed Contract Summary Sheet)</b>					
FY:15	FY:16	FY:17	FY:18	FY19	FY
\$513,950	\$494,530	\$174,850	\$98,960	\$65,000	\$
<b>*Current Total Expenditures by Fiscal Year of Contract: (attach backup documentation from Edison)</b>					
FY:	FY:	FY:	FY:	FY	FY
\$	\$	\$	\$	\$	\$
<b>IF</b> Contract Allocation has been greater than Contract Expenditures, please give the reasons and explain where surplus funds were spent:					
<b>IF</b> surplus funds have been carried forward, please give the reasons and provide the authority for the carry forward provision:					
<b>IF</b> Contract Expenditures exceeded Contract Allocation, please give the reasons and explain how funding was acquired to pay the overage:					

Supplemental Documentation Required for  
Fiscal Review Committee

<b>*Contract Funding Source/Amount:</b>			
State:	\$1,347,290	Federal:	
<i>Interdepartmental:</i>		<i>Other:</i>	
If “ <i>other</i> ” please define:			
If “ <i>interdepartmental</i> ” please define:			
Dates of All Previous Amendments or Revisions: <i>(if applicable)</i>		Brief Description of Actions in Previous Amendments or Revisions: <i>(if applicable)</i>	
Method of Original Award: <i>(if applicable)</i>			
*What were the projected costs of the service for the entire term of the contract prior to contract award? How was this cost determined?			
*List number of other potential vendors who could provide this good or service; efforts to identify other competitive procurement alternatives; and the reason(s) a sole-source contract is in the best interest of the State.		Sole-Source is in the best interest of the state because ICRA Sapphire, Inc., originally developed, customized and maintains the UVIS software for New York City, New Jersey, and Reno and Clark counties in Nevada. No other contractor has the experience and functional knowledge of the UVIS software and because of their experience and knowledge can provide configuration changes needed by Tennessee in a timely and and cost effective manner.	

# Special Contract Request

This form should be utilized to facilitate contract and procurement requests that require the Chief Procurement Officer's prior approval and that of the Comptroller of the Treasury, as applicable.

NOT required for a contract with a federal, Tennessee, or Tennessee local government entity or a grant.

Route a completed request, as one file in PDF format, via e-mail attachment sent to: agsprs.agsprs@tn.gov.

<b>APPROVED</b>		<b>APPROVED</b>	
CHIEF PROCUREMENT OFFICER	DATE	COMPTROLLER OF THE TREASURY	DATE

Request Tracking #	34352-12615
1. Contracting Agency	Health
2. Type of Contract or Procurement Method	<input type="checkbox"/> No Cost <input type="checkbox"/> Revenue <input checked="" type="checkbox"/> Sole Source <input type="checkbox"/> Proprietary <input type="checkbox"/> Competitive Negotiation <input type="checkbox"/> Other _____
3. Requestor Contact Information	Dr. Karen Cline-Parhamovich, State Chief Medical Examiner
4. Brief Goods or Services Caption	This is a sole source contract request for ICRA Sapphire, Inc. to provide services to install, modify and maintain the free open source Unified Victim Identification System - Daily Case Management System UVIS-(CMS) software.

Request Tracking #	34352-12615
5. Description of the Goods or Services to be Acquired	Contract services are required to install, modify and maintain the UVIS-CMS software which will be used by all Tennessee county medical examiners and the Office of the Chief Medical Examiner to document reportable deaths, provide uniform death investigation protocols and reporting; automate the tracking of death-related evidence; integrate and manage victim and missing person information for disaster victim management; and facilitate production of an annual report on death investigations (as required by TCA 38-7-201(d)(3).
6. Proposed Contractor	ICRA Sapphire, Inc.
7. Name & Address of the Contractor's principal owner(s) – NOT required for a TN state education institution	101 Merritt Boulevard Suite 107 Trumbull, Connecticut 06611 Richard Zboray President Phone: 203-375-8668
8. Proposed Contract Period – with ALL options to extend exercised The proposed contract start date shall follow the approval date of this request.	60 months
9. Office for Information Resources Pre-Approval Endorsement Request – information technology (N/A to THDA)	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Attached
10. eHealth Pre-Approval Endorsement Request – health-related professional, pharmaceutical, laboratory, or imaging	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Attached
11. Human Resources Pre-Approval Endorsement Request – state employee training	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Attached
12. Are these goods or services currently available on a statewide contract? If YES, please explain why the current statewide contract is not being used for this procurement.	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES,
13. Maximum Contract Cost – with ALL options to extend exercised	\$ 1,347,290
14. Was there an initial government estimate? If so, what amount?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, \$
15. Cost Determination Used- How did agency arrive at the estimate of expected costs?	The cost estimates were negotiated with ICRA Sapphire, Inc.
16. Explanation of Fair and Reasonable Price- Explain how agency determined that price is fair and reasonable	ICRA Sapphire, Inc. is the sole source provider of services to support UVIS-CMS.

<b>Request Tracking #</b>	<b>34352-12615</b>
<b>17. Documentation of Discussions with Contractor-</b> How did agency document discussions with Contractor? Attach documentation to this request as applicable.	Several meetings were held between ICRA Sapphire, Inc. and the Department of Health to define Health's business requirements and negotiate contract services and costs, but no documents of the meetings exists. However, the outcome of the meetings resulted in the ProForma contract.
<b>18. Explanation of Need for or requirement placed on the State to acquire the goods or services</b>	TCA38-7-201(d)(3)
<b>19. Proposed contract impact on current State operations</b>	The UVIS-CMS will provide uniform death investigation protocols, reporting, victim tracking and efficient electronic information release of reports and statistical information. The ultimate goal of the forensic investigation and autopsy is to develop logical, scientific, and unbiased information necessary to determine the cause and manner of death. This information is used for vital records, estate settlements, and survivor benefits, civil and criminal legal proceedings. The public expects a competent and consistent death investigation, every scene, every time, regardless of the county of death. Without a centralized system improvement in fatality management at local and state levels is severely limited.
<b>20. Justification –</b> Specifically explain why the goods or services should be acquired through the procurement method or contract type selected.	ICRA Sapphire is the sole source provider of services to maintain the UVIS-CMS.
<b>For No Cost and Revenue Contracts Only</b>	
<b>21. What costs will the State incur as a result of this contract? If any, please explain.</b>	
<b>22. What is the total estimated revenue that the State would receive as a result of this contract?</b>	
<b>23. Could the State also contract with other parties interested in entering substantially the same agreement? Please explain.</b>	<input type="checkbox"/> NO <input type="checkbox"/> YES
<b>24. Summary of State responsibilities under proposed contract</b>	
<b>For Sole Source and Proprietary Procurements Only</b>	

Request Tracking #	34352-12615
25. Explanation of Need for or requirement placed on the State to acquire the goods or services	<p>UVIS-CMS will:</p> <ol style="list-style-type: none"> <li>1. Provide a centralized source for all 95 counties to document all reportable deaths (including chain of custody), scene investigation, and external examination and autopsy findings.</li> <li>2. Provide uniform investigation protocols and reporting, tailored to the needs of Tennessee.</li> <li>3. Automate decedent/evidence/personal effect tracking for statewide consistency</li> <li>4. Enable electronic exchange of relevant information to other investigative agencies (child fatalities, mass fatalities, substance abuse trend)</li> <li>5. Integrate and manage missing persons and victim information for disaster victim management</li> <li>6. Enable the production of an annual report on death investigations in the state as required by TCA 38-7-201(d)(3).</li> </ol>
26. Evidence of Contractor's experience & length of experience providing the goods or services to be procured.	ICRA Sapphire, Inc. has been in business since 1981 and serves a global customer base providing software services and is ISO 9001 certified for design, development, testing, installation and maintenance of software.
27. Has the contracting agency procured the subject goods or services before? If yes, provide the method used to purchase the goods or services and the name and address of the contractor.	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Method: Name/Address:
28. Contractor selection process and efforts to identify reasonable, competitive, procurement alternatives	ICRA Sapphire, Inc. is the sole source provider of services for the UVIS-CMS system.
<b>Signature Required for all Special Contract Requests</b>	

Request Tracking #

34352-12615

**Agency Head Signature and Date** – *MUST be signed by the ACTUAL agency head as detailed on the current Signature Certification. Signature by an authorized signatory is acceptable only in documented circumstances*

John J. Dreyer, MD, MPH/EH

Signature: *David Reagin MD For J. Dreyer*

Date: *5/19/2014*



**ICRA sapphire inc.**  
Analytics • Development • Software

April 29, 2014

Mr. Mike Newman  
Tennessee Department of Health

Dear Mr. Newman:

ICRA Sapphire Inc. is the only company that provides technical Support for UVIS CMS. The Support is provided 24/7/365 for the City of New York, New Jersey and both Reno and Clark counties, Nevada.

ICRA Sapphire also was the company that developed, customized and maintains UVIS CMS for these clients.

Please let me know if you need any other information.

Sincerely,

Richard D. Zboray  
President

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☎ (203) 375-8668    ☎ (203) 375-1965    ✉ info@icrasapphire.com

101 Merritt Boulevard  
Suite 107  
Trumbull, Connecticut 06611  
[www.ICRASapphire.com](http://www.ICRASapphire.com)



# OIR Pre-Approval Endorsement Request E-Mail Transmittal

**TO :** Jane Chittenden, OIR Contracts  
Department of Finance & Administration  
E-mail : [Jane.Chittenden@tn.gov](mailto:Jane.Chittenden@tn.gov)

**FROM :** Carole Sumner  
E-mail : [Carole.Sumner@tn.gov](mailto:Carole.Sumner@tn.gov)

**DATE :** 05/16/2104

**RE :** Request for OIR Pre-Approval Endorsement

**Applicable RFS # 34352-12615**

**OIR Endorsement Signature & Date:**

**Chief Information Officer**

*NOTE: Proposed contract/grant support is applicable to the subject IT service technical merit.*

Office for Information Resources (OIR) pre-approval endorsement is required pursuant to procurement regulations pertaining to contracts with information technology as a component of the scope of service. This request seeks to ensure that OIR is aware of and has an opportunity to review the procurement detailed below and in the attached document(s). This requirement applies to any procurement method regardless of dollar amount.

Please indicate OIR endorsement of the described procurement (with the appropriate signature above), and return this document via e-mail at your earliest convenience.

<b>Contracting Agency</b>	<b>Health</b>
<b>Agency Contact</b> (name, phone, e-mail)	<b>Mike Newman, 253-5417, mike.newman@tn.gov</b>
<p><b>Attachments Supporting Request</b> (mark all applicable)</p> <p>Note: The complete draft procurement document and the applicable documents listed below must accompany this request when submitted to OIR. Special Contract Requests and Amendment Requests without Agency Head signature are acceptable. OIR is aware that these documents will not have CPO signature when submitted with this request.</p> <p> <input type="checkbox"/> Solicitation Document  <input checked="" type="checkbox"/> Special Contract Request  <input type="checkbox"/> Amendment Request  <input type="checkbox"/> Proposed Contract/Grant or Amendment  <input type="checkbox"/> Original Contract/Grant and Previous Amendments (if any) </p>	
<b>Information Systems Plan (ISP) Project Applicability</b>	

**Applicable RFS # 34352-12615**

To avoid delay of OIR pre-approval, the applicability of an ISP project to the procurement must be confirmed with agency IT staff prior to submitting this request to OIR. If necessary, agency IT staff should contact OIR Planning with questions concerning the need for an ISP project.

IT Director/Staff Name Confirming (required): Mike Newman

Applicable – Approved ISP Project# DC52C

Not Applicable

**Subject Information Technology Service Description**

This is a sole source contract for services to install, configure, modify and maintain the Unified Victim Identification System – Daily Case Management System (UVIS-CMS). The UVIS-CMS system will be hosted at the State data center using state standard architecture. UVIS-CMS will be a centralized system used by all counties and regional forensic centers to report and manage information about violent and suspicious deaths and unexpected natural deaths occurring in Tennessee. UVIS-CMS will meet the data collection, analysis, management and reporting needs of the OCME for all death investigations that fall within its jurisdiction. The protocols and work flow tools UVIS-CMS contains will standardize the investigation of and reporting on these deaths performed by CMEs and RFCs. UVIS-CMS will also capture information relevant to missing persons and victims in mass casualty events and enable the electronic exchange of information among agencies investigating and reporting on child fatalities and substance abuse trends, facilitating the production of an annual report on death investigations in the State as required by TCA 38-7-201(d)(3).



April 29, 2014

Mr. Mike Newman  
Tennessee Department of Health

Dear Mr. Newman:

ICRA Sapphire Inc. is the only company that provides technical Support for UVIS CMS. The Support is provided 24/7/365 for the City of New York, New Jersey and both Reno and Clark counties, Nevada.

ICRA Sapphire also was the company that developed, customized and maintains UVIS CMS for these clients.

Please let me know if you need any other information.

Sincerely,

A handwritten signature in black ink, appearing to read "R D Zboray", with a long horizontal stroke extending to the right.

Richard D. Zboray  
President

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(203) 375-8668 (203) 375-1965 info@icrasapphire.com

101 Merritt Boulevard  
Suite 107  
Trumbull, Connecticut 06611  
[www.ICRAsapphire.com](http://www.ICRAsapphire.com)

Proposed Contract

**CONTRACT  
BETWEEN THE STATE OF TENNESSEE,  
DEPARTMENT OF HEALTH  
AND  
ICRA SAPPHIRE INC.**

This Contract, by and between the State of Tennessee, Department of Health, hereinafter referred to as the "State" and ICRA Sapphire Inc., hereinafter referred to as the "Contractor," is for the provision of Unified Victim Identification System – Daily Case Management System software, software to be used by all Tennessee county medical examiners and the Office of the Chief Medical Examiner to document reportable deaths; provide uniform death investigation protocols and reporting; automate the tracking of death-related evidence; integrate and manage victim and missing person information for disaster victim management; and facilitate production of an annual report on death investigations (as required by TCA 38-7-201(d)(3), as further defined in the "SCOPE OF SERVICES."

The Contractor is a For-Profit Corporation.  
Contractor Place of Incorporation or Organization: Delaware  
Contractor Edison Registration ID # **Number**

**A. SCOPE OF SERVICES:**

- A.1. The Contractor shall provide all service and deliverables as required, described, and detailed herein and shall meet all service and delivery timelines as specified by this Contract.
- A.2. Service Definitions. Following are key definitions related to specific services requested in this Contract.
- a. **"AM"; "PM"**. AM means *ante mortem*. PM means *post mortem*.
  - b. **"Annual Report on Death Investigations"** means (definition in process 5/06/2014)
  - c. **Attachment A** means the "Tennessee UVIS CMS Project Outline," submitted to the State by the Contractor 4/23/2014.
  - d. **"CME" (County Medical Examiner)** means (definition in process 5/06/2014)
  - e. **"Department of Health's 5-Year Emergency Preparedness Strategic Plan for Fatality Management"** means (definition in process 5/06/2014)
  - f. **"EDRS" (Electronic Death Registration System)** means (definition in process 5/06/2014)
  - g. **"Exceptional Modifications and Enhancements"** means changes to the UVIS-CMS system to meet department of Health functional requirements.
  - h. **"Governor's Public Safety Action Plan"** means (definition in process 5/06/2014)
  - i. **"ICRA Sapphire"** means the Contractor
  - j. **"OCME (Office of Chief Medical Examiner)** means (definition in process 5/06/2014)
  - k. **"Phase 1"** means Phase 1 of the contract, as described under Section A.3, Service Goals, and Section A.5.a, Service Description, of the contract and in Section 2 of Attachment A.
  - l. **"Phase 2"** means Phase 2 of the contract, as described under Section A.3, Service Goals, and Section A.5.a, Service Description, of the contract and in Section 3 of Attachment A.
  - m. **"Phase 3"** means Phase 3 of the contract, as described under Section A.3, Service Goals, and Section A.5.a, Service Description, of the contract and in Section 4 of Attachment A.

Proposed Contract

- n. **“Phase 4”** means Phase 4 of the contract, as described under Section A.3, Service Goals, and Section A.5.a, Service Description, of the contract and in Section 5 of Attachment A.
- o. **“Reports of Investigations”** means (definition in process 5/06/2014)
- p. **“RFC” (Regional Forensic Center)** means (definition in process 5/06/2014)
- q. **“UVIS CMS”** means the UVIS Regular Operations software and the UVIS CMS Disaster Operations software, as tailored to the needs and as revised to meet the specifications, of the State of Tennessee, to be provided under the contract.

A.3. Service Goals. The goal of the contract is to implement a statewide centralized UVIS-CMS to replace the independent and highly-variable systems currently utilized by counties and regional forensic centers to report and manage information about violent and suspicious deaths and unexpected natural deaths occurring in Tennessee. UVIS-CMS will meet the data collection, analysis, management and reporting needs of the OCME for all death investigations that fall within its jurisdiction. The protocols and work flow tools UVIS-CMS contains will standardize the investigation of and reporting on these deaths performed by CMEs and RFCs. UVIS-CMS will also capture information relevant to missing persons and victims in mass casualty events and enable the electronic exchange of information among agencies investigating and reporting on child fatalities and substance abuse trends, facilitating the production of an annual report on death investigations in the State as required by TCA 38-7-201(d)(3).

In order to achieve these goals, the State has established the following key milestones for UVIS-CMS:

UVIS-CMS Milestone	Description	Target Date
Phase One: Deployment of Regular Operations death investigations functionality at three Regional Forensic Centers	Modification of UVIS-CMS software to meet the death investigation and reporting needs of the State and deployment of UVIS-CMS regular operations functionality at three Regional Forensic Centers: Johnson City (including the OCME), Knoxville, and Memphis (Shelby County).	1/01/2015
Phase Two: Deployment of Regular Operations death investigations functionality at two remaining Regional Forensic Centers	Further modification (based on Phase One outcomes) and deployment of enhanced UVIS-CMS regular operations software at the two remaining Regional Forensic Centers: Nashville (Davidson County) and Chattanooga (Hamilton County).	6/30/2015
Phase Three: Deployment of Regular Operations death Investigations functionality in CME offices in all 95 counties	Further modification (based on Phase Two outcomes) and deployment of enhanced UVIS-CMS regular operations software in CME offices in all 95 counties	6/30/2017
Phase Four: Statewide Deployment of Disaster Operations functionality	Modification of UVIS-CMS software to meet the disaster operations needs of the state, integration of disaster operations code with regular operations code, and deployment of integrated UVIS-CMS regular operations and disaster operations functionality statewide.	12/30/2015

A.4. Service Recipients. Service recipients are the Tennessee OCME, Regional Forensic Centers, county CMEs, and city, county, state, and federal agencies investigating fatalities, including those

## Proposed Contract

associated with disasters and mass casualty events; service recipients also include city, county, state, and federal officials investigating missing person reports associated with disasters and mass casualty events.

### A.5. Service Description. The Contractor shall deliver the services outlined herein.

#### a. Services will be delivered in the following four (4) phases;

- (1) Phase 1. Modify New Jersey and New York UVIS CMS regular operations design models and functionality to meet Tennessee OCME and RFC requirements. Deploy and support modified UVIS CMS regular operations functionality at three (3) RFCs: Johnson City (including OCME), Knoxville, and Memphis (Shelby County). Phase 1 will be completed within the first five (5) months of the contract.
- (2) Phase 2. Modify and enhance Tennessee UVIS CMS regular operations functionality on the basis of Phase 1 deployment experience and additional Tennessee requirements developed during Phase 1. Deploy and support modified/enhanced functionality at remaining two (2) RFCs in Nashville (Davidson County) and Chattanooga (Hamilton County) and incorporate modifications and enhancements into UVIS CMS functionality at OCME and RFCs included in Phase 1 deployment. Phase 2, which will begin in the third (3<sup>rd</sup>) month of the contract, will be completed within the first eight (8) months of the contract.
- (3) Phase 3. Modify, expand, and enhance Tennessee UVIS CMS regular operations functionality developed during Phase 1 and Phase 2 to meet Tennessee UVIS CME requirements. Deploy and support modified, expanded and enhanced functionality in ninety-five (95) Tennessee CME offices. During Phase 3, which will begin in the sixth (6<sup>th</sup>) month of the contract and will be completed within the first thirty (30) months of the contract, deployment will be completed at no fewer than five (5) CME offices per month, beginning in the eighth (8<sup>th</sup>) month of the contract.
- (4) Phase 4. Modify, expand, and enhance New Jersey and New York UVIS CMS disaster operations design models and functionality to meet Tennessee requirements. Integrate modified UVIS CMS disaster operations functionality with Tennessee UVIS CMS regular operations functionality and deploy and support modified UVIS CMS disaster operations functionality at OCME, five (5) RFCs, and ninety-five (95) CMEs. Phase 4, which will begin in the tenth (10<sup>th</sup>) month of the contract, will be completed within the first sixteen (16) months of the contract.

#### b. The following items must be delivered to the State for review and approval within the first (1<sup>st</sup>) week of the contract. The State shall, at its sole discretion, determine whether these items are acceptable to the State; in making such determination, the State may require, and the contractor shall provide, additional information.

- (1) Identification (name, title, and complete contact information) of contractor staff who will participate in each Phase of the contract and a description of the role to be performed during each Phase by each person identified. This list of contractor staff must identify, as a minimum, the contract project manager/project coordinator, the teams into which staff will be organized to perform services under the contract, and the lead for each team. These teams must be comprised of staff with experience with UVIS CMS and expertise in the following areas: gathering requirements, writing functional specifications, documenting work flows, developing and modifying code, performing systems integration (e.g., integrating UVIS CMS regular operations and disaster operations functionality), performing quality assurance (testing code and supporting user acceptance testing), supporting the go-live process at end-user sites, providing hands-on and remote training, providing 24-hour break-fix support, and providing system maintenance and support.
- (2) A high-level overview of deliverables to be provided during the contract, the outcomes these deliverables will accomplish, and the role of the State with respect to achieving

## Proposed Contract

these outcomes. This overview, which must address the operational interrelationships between contract phases and the functional relationships between the deliverables for each phase, must contain, for each Phase, the scope of the deliverables, key milestones for the provision of these deliverables, the contractor teams that will have responsibility for these deliverables, models/mock-ups of the tools the contractor will use to report to the State on the progress of these deliverables, the timetable for providing these reports, and the metrics against which success of the work done during the Phase will be measured.

- c. The specific services to be delivered during each contract phase are enumerated in items (1) – (16) below. The contractor will provide the State, no later than two weeks before the beginning of each contract phase, a detailed phase-specific project plan that identifies the scope of the phase, the deliverables to be provided during the phase, the timetable for provision of these deliverables, the role of the State with respect to the provision of these deliverables, and the schedule of project management activities, including reporting to the State, to be conducted by the contractor during the phase to assure the timely completion of tasks, to focus contractor resources on the resolution of issues that arise, and to advise the State as service delivery milestones are reached.
- (1) Gather and Assess Requirements, Gather Data, and Develop functional Tennessee UVIS CMS specifications documents detailing workflows and the processes for validating these workflows. Once the contractor has gathered and assessed sufficient requirements and data for a given contract phase, the contractor shall present these specifications documents to the State for review and written approval. After the State has approved these documents, the contractor shall develop specifications. Attachment A, Page 2 (2. Prepare Functional Specification Documents) describes the process that will be followed during contract Phase 1 and Phase 2 as this service is delivered; Attachment A Page 61 (items b – e of subphase 1) describes the process that will be followed in Phase 3. Attachment A, Page 63 (1. Gather and Detail Modification/Enhancement Requirements) describes the process that will be followed during Phase 4.
  - (2) Demonstrate Baseline Disaster Functionality to Stakeholders; Identify Elements and Functionality of Tennessee UVIS CMS Disaster Operations. Attachment A, Pages 63–65 (One 3-Day On-Site Demo/Modifications Identification Visit) describes the process of identifying the specifics of the elements and functionality that will be included in the Tennessee UVIS CMS disaster operations software, to be deployed in Phase 4.
  - (3) Develop Tennessee UVIS CMS Regular Operations Software, using and/or modifying New Jersey and/or New York code and, as necessary, developing new code that meets Tennessee specifications. Attachment A, Page 2 (3. Provide Development Services) provides an overview of these services. Attachment A, Pages 7 – 34 identifies the elements of UVIS CVS regular operations software functionality (General Dashboard, Administration, Case Intake, Investigations, Morgue, Identification, Records, Reports, and Ad-hoc Reporting) for which code is to be developed, explains the modifications to be made to existing code, explains the functionality of the system, and provides examples of the screens to be used to create and modify records, communicate information, and generate reports during contract Phase 1. Attachment A, Pages 42– 57 and Pages 59-60, provides this information for contract Phase 2 and contract Phase 3, respectively.
  - (4) Develop Tennessee UVIS CMS Disaster Operations Software, using and/or modifying New Jersey and/or New York code and, as necessary, developing new code that meets Tennessee specifications. Attachment A, Page 2 (3. Provide Development Services) provides an overview of these services. Attachment A, Pages 63 – 66 identifies the elements of UVIS CVS disaster operations software functionality (Incident Set-up, Call Center, Family Assistance Center, Investigations—Uploading Photos and Documents, Missing Persons Detectives Support, Post Mortem Support, AM PM Matching, DVI Exit Reviews, and Pre-canned Reports) to be included in the system and explains the modifications to be made to existing code to meet Tennessee requirements.

## Proposed Contract

- (5) Provide Quality Assurance. Attachment A, Page 2 (4. Provide Quality Assurance Services) provides an overview of these services, which will be provided during all contract phases.
- (6) Provide 1-Day On-site Overview for State Phase 1 Leadership Personnel. Attachment A, Pages 2 - 3 (5. Provide UVIS CMS (Regular Operations) Overview for Forensic Center Leadership) provides a description of this overview. The contractor will provide a similar session for Phase 2 leadership. Since Phase 2 will incorporate changes made to UVIS CMS regular operations after Phase 1 is completed, Phase 1 leadership will be invited to this Phase 2 leadership overview. No overview session for CMEs is planned for contract Phase 3.
- (7) Support User Acceptance Testing of System Modifications and Additions. Attachment A, Page 4 (7. Support User Acceptance Testing) provides an overview of these services to be provided during Phase 1 and Phase 2. Attachment A, Page 61 (item d of subphase 2) and Attachment A, Page 65 (8. Support User Acceptance Testing) identify similar services as a deliverables in Phase 3 and Phase 4, respectively.
- (8) Provide Remote Go Live Set-up Assistance. Attachment A, Page 4 (8. Provide Remote Go Live Set-up Assistance) identifies the set-up elements, including, but not limited to, user accounts, role definitions, county definitions, reference data, business rules, notification templates, report/letter headers, dashboards, etc.) to be included in this process and provides a description of these services to be provided during Phase 1 and Phase 2. Attachment A, Page 58 (item f of subphase 3) identifies similar services to be provided during Phase 2. Similar services, to be delivered during Phase 3, are described in Attachment A, Pages 61 - 62 (item c of subphase 3, item b of subphase 4, item c of subphase 5, and item b of subphase 6).
- (9) Provide On-site Go Live Set-up Assistance. Attachment A, Page 65 (7. Provide 5 days onsite Go Live Assistance) describes the set-up assistance services to be provided at a single site during Phase 4.
- (10) Provide 3-Day On-site Training at Each Forensic Center. Attachment A, Pages 36 – 40 and Attachment A Page 57 describe in detail the training, by role, length of training, and number of staff to be trained, to be provided forensic center staff during Phase 1 and Phase 2, respectively.
- (11) Provide Two 4-Day On-site Train-the-trainer sessions for CMEs; provide One 4-day on-site refresher Train-the-trainer session for CMEs. Attachment A, Page 61 (item b of subphase 3 and item b of subphase 5), identifies the training to be provided during Phase 3.
- (12) Provide One 3-day On-site Training for Disaster Operations Staff. Attachment A, Page 65 ((5. Provide 3-days onsite training for five separate sessions (user roles)) identifies the training to be provided during Phase 4.
- (13) Provide On-site Go Live Support. Attachment A, Page 5 (9. Provide Onsite Go Live Support) identifies the support to be provided by two contractor consultants at each forensic center during the go live portion of Phases 1 and 2. Attachment A, Page 58 (item g of subphase 3) identifies the four days (two consultants, one day each at two sites) of support to be provided during Phase 3
- (14) Provide System Documentation. Attachment A, Page 6 (10. Provide System Documentation) identifies the components of the system documentation that the contractor will provide for UVIS CMS Regular Operations and UVIS CMS Disaster Operations software.
- (15) Provide Source Code Attachment A, Page 6 (11. Provide Source Code) describes the process of source code development and maintenance that the contractor will employ

## Proposed Contract

and states that the contractor will provide this code to the State. The contractor shall update this documentation and source code during the term of the contract, on an as-needed basis, to reflect changes made to UVIS CMS Regular Operations and UVIS CMS Disaster operations design and functionality.

- (16) Provide Maintenance and Support of System Software throughout the Term of the Contract. Attachment A, Page 6, (12. Provide Support through Duration of Project following Go Live) and the Appendix to Attachment A (Sample Maintenance and Support Agreement), Pages 69 - 72, describe the 24-hour break/fix support and software system maintenance and support to be provided under the contract. The contractor shall maintain and support the Tennessee UVIS CMS Regular Operations software and the Tennessee UVIS Disaster Operations software developed and deployed under this contract throughout the entire term of the contract in compliance with the procedures and timetables contained in this Appendix.
- A.6. Project Management and Reporting. The contractor shall designate a single project manager to serve as the contractor's primary point of contact for all activities and issues. The contractor shall ensure that its project manager provides sufficient management of the project to ensure that all project activities are performed efficiently, accurately, on schedule, and within budget. The project manager shall track progress against the project schedule and shall report to the State in a bi-monthly status report. The report shall include, at a minimum:
- Progress towards project milestones
  - Explanations of schedule variances relative to the previous month's progress report and the baseline schedule and cost projections and the proposed solutions to these issues
  - Updates on implementations
  - Status of deliverables
  - Current action items and status
  - Status of Exceptional Modification and Enhancement initiatives
- A.7. System and Integration Testing. The Contractor shall fully test all software to ensure that it meets requirements and to demonstrate the functionality and performance characteristics before the start of User Acceptance Testing. The system tests shall actively use all of the functions, test all interfaces, and process all types of input. The Contractor shall include specific types of test cases and transactions in the test, as specified by the State.
- A.8. User Acceptance Testing (UAT). The contractor shall provide the State a User Acceptance Test (UAT) plan for each contract phase and, after the State has approved this plan, shall work with the State to facilitate and coordinate the execution of UAT by the State in the designated test environment. The Contractor shall include the processes and procedures recommended by the State for UAT in the Test Plan.
- A.9. Exceptional Modifications and Enhancements. The State and the contractor have worked together to identify the anticipated modifications and enhancements to the New Jersey UVIS CMS and the New York UVIS CMS that will be necessary to create a Tennessee UVIS CMS Regular Operations and Disaster Operations software that meets the State's requirements. These modifications and enhancements are identified and described, by contract phase, in the Project Outline, Attachment A to this contract, and compensation to the contractor for these modifications and enhancements is included in the payment rates for each project phase include in Section C.3.b of the pro forma contract. The State anticipates, however, that the need will arise during the contract for additional, exceptional modifications and enhancements that have not been anticipated and are not included in Attachment A or the payment rates for each contract phase. Payment for these additional modifications and enhancements will be at the rate included in the payment rate for Exceptional Modifications and Enhancements in Section C.3.b of the pro forma contract.

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When the State identifies a requirement that has not been anticipated and identified in the Project Outline, the State will request that the contractor develop an estimate for the work necessary to satisfy this requirement. This estimate must include:

- The total fixed cost, based upon the total number of hours and the payment rates specified in contract section C.3, to deliver the exceptional modification or enhancement.
- A description of the work to be performed and the functionality of the modification or enhancement within the Tennessee UVIS CMS Regular Operations and/or Disaster Operations software.
- The estimated delivery date of the exceptional modification or enhancement.

The State, at its sole discretion, may accept or reject the contractor's estimate. If the State accepts the estimate, the State will authorize the contractor to begin work to integrate the modification or enhancement into processes, including UAT, described in Attachment A. If the State does not accept the estimate, the State may either elect not to proceed with the modification or enhancement or to negotiate changes to the estimate with the contractor.

- A.10 Training. The contractor shall provide training for each contract phase as described in Attachment A and shall provide training materials in sufficient quantities, both for staff trained by the contractor and for staff trained by trainers trained by the contractor. At its sole discretion, the State shall determine the adequacy of training and training materials provided by the contractor.
- A.11. Maintenance and Support of Deployed Tennessee UVIS CMS Regular Operations Software and Disaster Operations Software. The contractor shall provide maintenance and support of the software deployed under this contract as described in Section 7, Appendix: Sample Maintenance and Support Agreement, of Attachment A. This support shall be provided at no cost during the first two years of the contract and at the yearly maintenance fee specified in Contract Section C.3.b.
- A.12. Responsibilities of the State. The responsibilities of the State with respect to providing and supporting the technology environment within which the contractor will develop, test, and deploy the Tennessee UVIS CMS Regular Operations and Disaster Operations software are described in Attachment A, Section 6: Assumptions, Page 68 (Tennessee Environments; Web-Access for Users, Workstation/notebook Set-up for Users, and Hardware Support by Tennessee).

### **B. CONTRACT PERIOD:**

This Contract shall be effective for the period beginning July 20, 2014, and ending on July 19, 2019. The Contractor hereby acknowledges and affirms that the State shall have no obligation for services rendered by the Contractor which were not performed within this specified contract period.

### **C. PAYMENT TERMS AND CONDITIONS:**

- C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed one million three hundred forty-seven thousand two hundred ninety dollars (\$1,347,290). The payment rates in section C.3 shall constitute the entire compensation due the Contractor for all service and Contractor obligations hereunder regardless of the difficulty, materials or equipment required. The payment rates include, but are not limited to, all applicable taxes, fees, overheads, and all other direct and indirect costs incurred or to be incurred by the Contractor.

The Contractor is not entitled to be paid the maximum liability for any period under the Contract or any extensions of the Contract for work not requested by the State. The maximum liability represents available funds for payment to the Contractor and does not guarantee payment of any such funds to the Contractor under this Contract unless the State requests work and the Contractor performs said work. In which case, the Contractor shall be paid in accordance with the payment rates detailed in section C.3. The State is under no obligation to request work from the Contractor in any specific dollar amounts or to request any work at all from the Contractor during any period of this Contract.

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- C.2. Compensation Firm. The payment rates and the maximum liability of the State under this Contract are firm for the duration of the Contract and are not subject to escalation for any reason unless amended.
- C.3. Payment Methodology. The Contractor shall be compensated based on the payment rates herein for units of service authorized by the State in a total amount not to exceed the Contract Maximum Liability established in section C.1.
- a. The Contractor's compensation shall be contingent upon the satisfactory completion of units, milestones, or increments of service defined in section A.
  - b. The Contractor shall be compensated for said units, milestones, or increments of service based upon the following payment rates:

Service Description	Amount (per compensable increment)
<b>Project Phases</b>	
<p><b><u>Phase 1. Modify and Deploy UVIS CMS Regular Operations Functionality at Three Forensic Centers.</u></b> The contractor shall complete Phase 1 of the project in the four subphases identified below. Unless otherwise specified, all deliverables are to the State project team. Payment, in the percentage amounts identified below, will be made at the end of subphase 1, the end of subphase 3, and the end of subphase 4.</p>	<p><b>\$276,980</b> <b>To be paid in the percentage amounts below</b></p>
<p>20% Subphase 1. Develop and deliver project plan for Phase 1. Conduct five days on-site data collection at three Phase 1 RFCs, followed by supplementary remote interviewing. Develop and deliver specifications for proposed modifications to UVIS CMS functionality to meet Tennessee requirements. Payment to be made upon State acceptance of specifications for proposed modifications.</p>	<p><b>\$55,396</b></p>

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Service Description	Amount (per compensable increment)
<p>70% Subphase 2 and subphase 3. Develop and deliver State-accepted modifications to New Jersey and New York UVIS CMS functionality, with monthly teleconference/Go-To-Meeting reviews of progress. Resolve issues as they are identified. Deliver software containing modified UVIS CMS Regular Operations functionality to Phase 1 RFCs and assist State in installing software. Deliver 3-day demonstration of developed functionality on-site at three Phase 1 RFCs in preparation for UAT; provide remote support for UAT. Deliver modified quick reference sheets. Payment to be made upon State acceptance of modified functionality, of quick reference sheets, and of results of UAT.</p>	<p><b>\$193,886</b></p>
<p>10% Subphase 4. Provide 1-day on-site overview of Tennessee UVIS CMS for Department of Health leadership, including OCME and RFCs. Deliver 3-day on-site role-based training at each of 3 RFCs, including OCME. Deliver remote go-live set-up assistance, followed by 2-day on-site go-live deployment support at each of 3 RFCs, including OCME. Deliver Phase 1 Tennessee UVIS CMS system documentation and source code. Payment to be made upon State acceptance of documentation and source code and of results of go live deployment at all Phase 1 RFCs.</p>	<p><b>\$27,698</b></p>
<p><b><u>Phase 2. Modify, Enhance, and Deploy UVIS CMS Regular Operations Functionality at Two Remaining Forensic Centers.</u></b> The contractor shall complete Phase 2 of the project in the three subphases identified below. Unless otherwise specified, all deliverables are to the State project team. Payment, in the percentage amounts identified below, will be made at the end of subphase 1, the end of subphase 2, and the end of subphase 3.</p>	<p><b>\$263,300</b></p> <p><b>To be paid in the percentage amounts below</b></p>
<p>20% Subphase 1. Develop and deliver project plan for Phase 2. Conduct five days on-site data collection at two Phase 2 RFCs, followed by supplementary remote interviewing at all RFCs. Develop and deliver additional specifications for proposed further modifications to and enhancements of UVIS CMS functionality to meet Tennessee requirements, incorporating lessons learned during Phase 1. Payment to be made upon State acceptance of specifications for proposed further modifications and enhancements.</p>	<p><b>\$52,660</b></p>

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Service Description	Amount (per compensable increment)
<p><u>70% Subphase 2.</u> Develop and deliver State-accepted further modifications to and enhancements of New Jersey and New York UVIS CMS functionality, with monthly teleconference/Go-To-Meeting reviews of progress. Resolve issues as they are identified. Deliver software containing modified and enhanced UVIS CMS Regular Operations functionality to all RFCs and assist state in installing software. Deliver 3-day demonstration of developed functionality on-site at two Phase 2 RFCs in preparation for UAT; provide remote support for UAT. Deliver modified quick reference sheets. Payment to be made upon State acceptance of modified and enhanced functionality, of quick reference sheets, and of results of UAT.</p>	<p><b>\$184,310</b></p>
<p><u>10% Subphase 3.</u> Deliver 3-day on-site role-based training at each of two Phase 2 RFCs and teleconference/Go-To-Meeting training for three Phase 1 RFCs, addressing further modifications to/enhancements of software. Deliver remote go-live set-up assistance to all RFCs, followed by 2-day on-site go-live deployment support at each of two Phase 2 RFCs and teleconference/Go-To-Meeting go-live deployment support for three Phase 1 RFCs. Deliver Phase 2 Tennessee UVIS CMS system documentation and source code. Payment to be made upon State acceptance of documentation and source code and of results of go live deployment at all RFCs.</p>	<p><b>\$26,330</b></p>
<p><b><u>Phase 3. Modify and Deploy UVIS CMS Regular Operations Functionality at 95 County Medical Examiner Offices.</u></b> The contractor shall complete Phase 3 of the project in the six subphases identified below. Unless otherwise specified, all deliverables are to the State project team. Payment, in the percentage amounts identified below, will be made at the end of each subphase.</p>	<p><b>\$308,700</b></p> <p><b>To be paid in the percentage amounts below</b></p>
<p><u>15% Subphase 1.</u> Develop and deliver project plan for Phase 3. Conduct three days on-site data collection at selected CMOs, followed by two additional days of on-site data collection at selected CMOs, followed by supplementary remote interviewing at selected CMOs. Develop and deliver specifications for proposed modifications to UVIS CMS functionality to meet Tennessee requirements. Payment to be made upon State acceptance of specifications for proposed modifications and enhancements.</p>	<p><b>\$46,305</b></p>

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<b>Service Description</b>	<b>Amount</b> (per compensable increment)
<p><u>35% Subphase 2.</u> Develop and deliver State-accepted modifications to New Jersey and New York UVIS CMS functionality, with monthly teleconference/Go-To-Meeting reviews of progress. Resolve issues as they are identified. Deliver software containing modified UVIS CMS Regular Operations functionality to five selected CMOs and assist State in installing software. Deliver 1.5-day demonstration of developed functionality on-site at each of five CMOs in preparation for UAT; provide remote support for UAT. Payment to be made upon State acceptance of modified functionality and of results of UAT.</p>	<b>\$108,045</b>
<p><u>13% Subphase 3.</u> Deliver software containing modified UVIS CMS Regular Operations functionality to first 25 CMOs (including five CMO UAT sites) and provide State remote assistance in installing software. Deliver system documentation and source code. Deliver four-day train-the-trainer training sessions, for State trainers supporting go-live at first 50 CMO sites, at each of two locations. Provide remote go-live set-up assistance to first 25 sites. Deliver 1-day on-site support at two CMO sites by contractor consultants for go-live at first 25 CMOs. Payment to be made upon State acceptance of documentation and source code and of results of go live deployment at first 25 CMOs.</p>	<b>\$40,130</b>
<p><u>13% Subphase 4.</u> Deliver software containing modified UVIS CMS Regular Operations functionality to second 25 CMOs and provide State remote assistance in installing software. Provide remote go-live set-up assistance to second 25 sites. Deliver 1-day on-site support at two CMO sites by contractor consultants for go-live at second 25 CMOs. Payment to be made upon State acceptance of results of go live deployment at second 25 CMOs.</p>	<b>\$40,130</b>
<p><u>13% Subphase 5.</u> Deliver software containing modified UVIS CMS Regular Operations functionality to third 25 CMOs and provide State remote assistance in installing software. Deliver four-day refresher train-the-trainer training session, for State trainers supporting go-live at CMO sites, at one location. Provide remote go-live set-up assistance to third 25 sites. Deliver 1-day on-site support at two CMO sites by contractor consultants for go-live at third 25 CMOs. Payment to be made upon State acceptance of results of go live deployment at third 25 CMOs.</p>	<b>\$40,130</b>
<p><u>11% Subphase 6.</u> Deliver software containing modified UVIS CMS Regular Operations functionality to final 20 CMOs and provide State remote assistance in installing software. Provide remote go-live set-up assistance to final 20 sites. Deliver 1-day on-site support at two CMO sites by contractor consultants for go-live at final 20 CMOs. Payment to be made upon State acceptance of results of go live deployment at final 20 CMOs.</p>	<b>\$33,960</b>

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Service Description	Amount (per compensable increment)
<p><b><u>Phase 4. Modify and Deploy UVIS CMS Disaster Operations Functionality (integrated with Tennessee USIV CMS Regular Operations Functionality) statewide.</u></b> The contractor shall complete Phase 4 of the project in the four subphases identified below. Unless otherwise specified, all deliverables are to the State project team. Payment, in the percentage amounts identified below, will be made at the end of subphase 1, the end of subphase 2, the end of subphase 3, and the end of subphase 4.</p>	\$295,900
<p><u>15% Subphase 1.</u> Develop and deliver project plan for Phase 4. Conduct five days on-site data collection at selected State locations, followed by supplementary remote interviewing. Develop and deliver specifications for proposed modifications to UVIS CMS AM Disaster Operations functionality (integrated with Tennessee UVIS CMS Regular Operations functionality) to meet Tennessee requirements. Payment to be made upon State acceptance of specifications for proposed modifications.</p>	\$44,385
<p><u>40% Subphase 2.</u> Develop and deliver State-accepted modifications to New Jersey and New York UVIS CMS A.M. functionality, with monthly teleconference/Go-To-Meeting reviews of progress. Resolve issues as they are identified. Deliver software containing modified UVIS CMS AM Disaster Operations functionality to State and assist State in installing software. Deliver 3-day demonstration of developed AM functionality on-site at one selected State location in preparation for UAT; provide remote support for UAT. Payment to be made upon State acceptance of modified functionality and of results of UAT.</p>	<b>\$118,360</b>
<p><u>35% Subphase 3.</u> Develop and deliver State-accepted modifications to New Jersey and New York UVIS CMS P.M. functionality, with monthly teleconference/Go-To-Meeting reviews of progress. Resolve issues as they are identified. Deliver software containing modified UVIS CMS A.M., P.M., and A.M.-P.M Matching Disaster Operations functionality (integrated with Tennessee USIV CMS Regular Operations functionality) to one selected State location and assist State in installing software. Deliver 3-day demonstration of developed AM, PM and AM-PM matching functionality on-site at one selected State location in preparation for UAT; provide remote support for UAT. Deliver modified quick reference sheets. Payment to be made upon State acceptance of modified AM, PM, and AM-PM matching functionality, of quick reference sheets, and of results of UAT.</p>	\$103,565
<p><u>10% Subphase 4.</u> Provide 1-day on-site overview of Tennessee UVIS CMS for Department of Health leadership. Deliver 2-day on-site role-based training at selected State site. Deliver remote go-live set-up assistance, followed by 2-day on-site go-live deployment support at one selected State location. Deliver Phase 4 Tennessee UVIS CMS Disaster Operations system documentation and source code. Payment to be made upon State acceptance of documentation and source code and of results of go live deployment statewide, including RFCs, the OCME, and CMOs.</p>	<b>\$29,590</b>

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Service Description	Amount (per compensable increment)
<b>Exceptional Modifications and Enhancements:</b> Applied time (rate per applied labor hour, for each position, below) for performance of services of Exceptional Modifications and Enhancements, as defined and described in pro forma contract section A.9 (and as distinct from the modifications and enhancements described in Pro Forma Contract Sections A3 and A5.a and Attachment A and included in the amounts for Phases 1 – 4, above).	
	<b>\$7,410</b>
Developer	<b>\$28.75/hour</b>
Quality Assurance Specialist	<b>\$25.875/hour</b>
<b>Annual Maintenance and Support of Software</b>	
Contract Year 1	<b>\$0</b>
Contract Year 2	<b>\$0</b>
Contract Year 3, to be paid at the end of contract year 2	<b>\$65,000</b>
Contract Year 4 to be paid at the end of contract year 3	<b>\$65,000</b>
Contract Year 5, to be paid at the end of contract year 4	<b>\$65,000</b>

C.4. Travel Compensation. The Contractor shall not be compensated or reimbursed for travel, meals, or lodging.

C.5. Invoice Requirements. The Contractor shall invoice the State only for completed increments of service and for the amount stipulated in section C.3, above, and present said invoices no more often than monthly, with all necessary supporting documentation, to:

Carole Sumner, Director of Administrative Services  
Tennessee Department of Health – Information Technology Services  
Andrew Johnson Tower – 6<sup>th</sup> Floor  
710 James Robertson Parkway  
Nashville, TN 37243

- a. Each invoice shall clearly and accurately detail all of the following required information (calculations must be extended and totaled correctly).
- (1) Invoice Number (assigned by the Contractor)
  - (2) Invoice Date
  - (3) Contract Number (assigned by the State)
  - (4) Customer Account Name: TN Department of Health – Office of Chief Medical Examiner
  - (5) Customer Account Number (assigned by the Contractor to the above-referenced Customer)
  - (6) Contractor Name
  - (7) Contractor Tennessee Edison Registration ID Number Referenced in Preamble of this Contract
  - (8) Contractor Contact for Invoice Questions (name, phone, and/or fax)
  - (9) Contractor Remittance Address
  - (10) Description of Delivered Service

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- (11) Complete Itemization of Charges, which shall detail the following:
- i. Service or Milestone Description (including name & title as applicable) of each service invoiced
  - ii. Number of Completed Units, Increments, Hours, or Days as applicable, of each service invoiced
  - iii. Applicable Payment Rate (as stipulated in Section C.3.) of each service invoiced
  - iv. Amount Due by Service
  - v. Total Amount Due for the invoice period

b. The Contractor understands and agrees that an invoice under this Contract shall:

- (1) include only charges for service described in Contract Section A and in accordance with payment terms and conditions set forth in Contract Section C;
- (2) only be submitted for completed service and shall not include any charge for future work;
- (3) not include sales tax or shipping charges; and
- (4) initiate the timeframe for payment (and any discounts) only when the State is in receipt of the invoice, and the invoice meets the minimum requirements of this section C.5.

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or matter in relation thereto. A payment by the State shall not be construed as acceptance of any part of the work or service provided or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment theretofore made which are determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, not to constitute proper remuneration for compensable services.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee any amounts, which are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following documentation properly completed.

- a. The Contractor shall complete, sign, and present to the State an "Authorization Agreement for Automatic Deposit (ACH Credits) Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once said form is received by the State, all payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee shall be made by Automated Clearing House (ACH).
- b. The Contractor shall complete, sign, and present to the State a "Substitute W-9 Form" provided by the State. The taxpayer identification number detailed by said form must agree with the Contractor's Federal Employer Identification Number or Tennessee Edison Registration ID referenced in this Contract.

## D. STANDARD TERMS AND CONDITIONS:

D.1. Required Approvals. The State is not bound by this Contract until it is signed by the contract parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

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- D.2. Modification and Amendment. This Contract may be modified only by a written amendment signed by all parties hereto and approved by both the officials who approved the base contract and, depending upon the specifics of the contract as amended, any additional officials required by Tennessee laws and regulations (said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).
- D.3. Termination for Convenience. The State may terminate this Contract without cause for any reason. Said termination shall not be deemed a breach of contract by the State. The State shall give the Contractor at least thirty (30) days written notice before the effective termination date. The Contractor shall be entitled to compensation for satisfactory, authorized service completed as of the termination date, but in no event shall the State be liable to the Contractor for compensation for any service which has not been rendered. Upon such termination, the Contractor shall have no right to any actual general, special, incidental, consequential, or any other damages whatsoever of any description or amount.
- D.4. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor violates any terms of this Contract, the State shall have the right to immediately terminate the Contract and withhold payments in excess of fair compensation for completed services. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any breach of this Contract by the Contractor.
- D.5. Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of the State. If such subcontracts are approved by the State, each shall contain, at a minimum, sections of this Contract below pertaining to "Conflicts of Interest," "Nondiscrimination," and "Records" (as identified by the section headings). Notwithstanding any use of approved subcontractors, the Contractor shall be the prime contractor and shall be responsible for all work performed.
- D.6. Conflicts of Interest. The Contractor warrants that no part of the total Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed relative to this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six months has been, an employee of the State of Tennessee.

- D.7. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Contractor shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.
- D.8. Prohibition of Illegal Immigrants. The requirements of *Tennessee Code Annotated*, Section 12-4-124, *et seq.*, addressing the use of illegal immigrants in the performance of any Contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.
- a. The Contractor hereby attests, certifies, warrants, and assures that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor

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shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the document at Attachment **Reference**, hereto, semi-annually during the period of this Contract. Such attestations shall be maintained by the Contractor and made available to state officials upon request.

- b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the period of this Contract, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an illegal immigrant to perform work relative to this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work relative to this Contract. Attestations obtained from such subcontractors shall be maintained by the Contractor and made available to state officials upon request.
  - c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Said records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.
  - d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of *Tennessee Code Annotated*, Section 12-4-124, *et seq.* for acts or omissions occurring after its effective date. This law requires the Commissioner of Finance and Administration to prohibit a contractor from contracting with, or submitting an offer, proposal, or bid to contract with the State of Tennessee to supply goods or services for a period of one year after a contractor is discovered to have knowingly used the services of illegal immigrants during the performance of this Contract.
  - e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not either a United States citizen, a Lawful Permanent Resident, or a person whose physical presence in the United States is authorized or allowed by the federal Department of Homeland Security and who, under federal immigration laws and/or regulations, is authorized to be employed in the U.S. or is otherwise authorized to provide services under the Contract.
- D.9. **Records.** The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, insofar as they relate to work performed or money received under this Contract, shall be maintained for a period of three (3) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.
- D.10. **Prevailing Wage Rates.** All contracts for construction, erection, or demolition or to install goods or materials that involve the expenditure of any funds derived from the State require compliance with the prevailing wage laws as provided in *Tennessee Code Annotated*, Section 12-4-401, *et seq.*
- D.11. **Monitoring.** The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.
- D.12. **Progress Reports.** The Contractor shall submit brief, periodic, progress reports to the State as requested.
- D.13. **Strict Performance.** Failure by any party to this Contract to insist in any one or more cases upon the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any such term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the parties hereto.

## Proposed Contract

D.14. Independent Contractor. The parties hereto, in the performance of this Contract, shall not act as employees, partners, joint venturers, or associates of one another. It is expressly acknowledged by the parties hereto that such parties are independent contracting entities and that nothing in this Contract shall be construed to create an employer/employee relationship or to allow either to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever.

The Contractor, being an independent contractor and not an employee of the State, agrees to carry adequate public liability and other appropriate forms of insurance, including adequate public liability and other appropriate forms of insurance on the Contractor's employees, and to pay all applicable taxes incident to this Contract.

D.15. State Liability. The State shall have no liability except as specifically provided in this Contract.

D.16. Force Majeure. The obligations of the parties to this Contract are subject to prevention by causes beyond the parties' control that could not be avoided by the exercise of due care including, but not limited to, natural disasters, riots, wars, epidemics, or any other similar cause.

D.17. State and Federal Compliance. The Contractor shall comply with all applicable State and Federal laws and regulations in the performance of this Contract.

D.18. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee. The Contractor agrees that it will be subject to the exclusive jurisdiction of the courts of the State of Tennessee in actions that may arise under this Contract. The Contractor acknowledges and agrees that any rights or claims against the State of Tennessee or its employees hereunder, and any remedies arising therefrom, shall be subject to and limited to those rights and remedies, if any, available under *Tennessee Code Annotated*, Sections 9-8-101 through 9-8-407.

D.19. Completeness. This Contract is complete and contains the entire understanding between the parties relating to the subject matter contained herein, including all the terms and conditions of the parties' agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the parties relating hereto, whether written or oral.

D.20. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions hereof shall not be affected thereby and shall remain in full force and effect. To this end, the terms and conditions of this Contract are declared severable.

D.21. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.

### **E. SPECIAL TERMS AND CONDITIONS:**

E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, these special terms and conditions shall control.

E.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by EMAIL or facsimile transmission with recipient confirmation. Any such communications, regardless of method of transmission, shall be addressed to the respective party at the appropriate mailing address, facsimile number, or EMAIL address as set forth below or to that of such other party or address, as may be hereafter specified by written notice.

## Proposed Contract

The State:

### General

Mike Newman, CIO  
Tennessee Department of Health  
Andrew Johnson Tower – 6<sup>th</sup> Floor  
710 James Robertson Parkway  
Nashville, TN 37243  
[Mike.Newman@tn.gov](mailto:Mike.Newman@tn.gov)  
Telephone # (615) 253-5417

### Technical Matters

Marsha Sumner, Deputy CIO  
Tennessee Department of Health – Information Technology Services Division  
Andrew Johnson Tower – 6<sup>th</sup> Floor  
710 James Robertson Parkway  
Nashville, TN 37243  
[Marsha.Sumner@tn.gov](mailto:Marsha.Sumner@tn.gov)  
Telephone # (615) 741-7176

The Contractor:

Richard Zboray, President  
ICRA Sapphire, Inc.  
101 Merritt Boulevard  
Trumbull, Connecticut 06611  
richardz@icrasapphire.com  
Telephone # (203) 375-8668  
FAX # (203) 375-1965

All instructions, notices, consents, demands, or other communications shall be considered effectively given upon receipt or recipient confirmation as may be required.

- E.3. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State and/or Federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate the Contract upon written notice to the Contractor. Said termination shall not be deemed a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. Should such an event occur, the Contractor shall be entitled to compensation for all satisfactory and authorized services completed as of the termination date. Upon such termination, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages whatsoever of any description or amount.
- E.4. Tennessee Consolidated Retirement System. The Contractor acknowledges and understands that, subject to statutory exceptions contained in *Tennessee Code Annotated*, Section 8-36-801, *et. seq.*, the law governing the Tennessee Consolidated Retirement System (TCRS), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established pursuant to *Tennessee Code Annotated*, Title 8, Chapter 35, Part 3 accepts state employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor, if a retired member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the period of this Contract.

Proposed Contract

E.5 Tennessee Department of Revenue Registration. The Contractor shall be registered with the Department of Revenue for the collection of Tennessee sales and use tax. This registration requirement is a material requirement of this Contract.

**IN WITNESS WHEREOF,**

**ICRA Sapphire, Inc.**

---

**CONTRACTOR SIGNATURE**

**DATE**

---

**PRINTED NAME AND TITLE OF CONTRACTOR SIGNATORY (above)**

**DEPARTMENT OF HEALTH**

---

**JOHN J. DREYZEHNER, MD, MPH  
COMMISSIONER**

**DATE**

**ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE**

<b>SUBJECT CONTRACT NUMBER:</b>	
<b>CONTRACTOR LEGAL ENTITY NAME:</b>	
<b>FEDERAL EMPLOYER IDENTIFICATION NUMBER:</b> (or Social Security Number)	

**The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.**

---

**CONTRACTOR SIGNATURE**

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. If said individual is not the chief executive or president, this document shall attach evidence showing the individual's authority to contractually bind the Contractor.

---

**PRINTED NAME AND TITLE OF SIGNATORY**

---

**DATE OF ATTESTATION**

# **TENNESSEE UVIS CMS PROJECT OUTLINE**

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Original Date of Submission: March 28, 2014

Current Date: April 23, 2014

by

Richard D. Zboray  
President  
ICRA Sapphire Inc.  
101 Merritt Blvd.  
Trumbull, Ct. 06611  
Tel: (203) 375-8668

## **Section 1**

### **Summary of Services To Be Provided Tennessee: All Phases**

#### **1. Prepare and Update Phase-Specific Project Plan**

The Plan will provide a high-level overview of deliverables in terms of scope and target delivery dates. ICRA Sapphire will update the plan bi-weekly.

#### **2. Prepare Functional Specification Document for Modifications**

ICRA Sapphire will prepare a Functional Specification Document for Tennessee approval for the work to be performed in each Phase. One person will be authorized to sign-off the Document. The work will detail and validate workflows for modifications and new functionality from the NJ UVIS CMS base system. Screen mock-ups will be used to clarify proposed work. The work will include:

- Telephone and Go-To-Meeting for interviews, requirements gathering and presentations necessary for finalizing workflow details
- One three day onsite assessment and data collection visit
- One two day secondary visit for presentation and additional data collection
- A written report

#### **3. Provide Development Services**

For coding modifications and new functionality, Sapphire will provide Team Leads with experience working with UVIS CMS. Sapphire also will provide a Project Coordinator with UVIS CMS experience and developers and designers.

#### **4. Provide Quality Assurance Services**

Sapphire will provide a Quality Assurance (QA) team to perform unit and system testing on code. Regression testing will be performed for issue resolution. The Team Lead will have experience working with UVIS CMS

#### **5. Provide UVIS CMS Overview for Phase Leadership/Stakeholders**

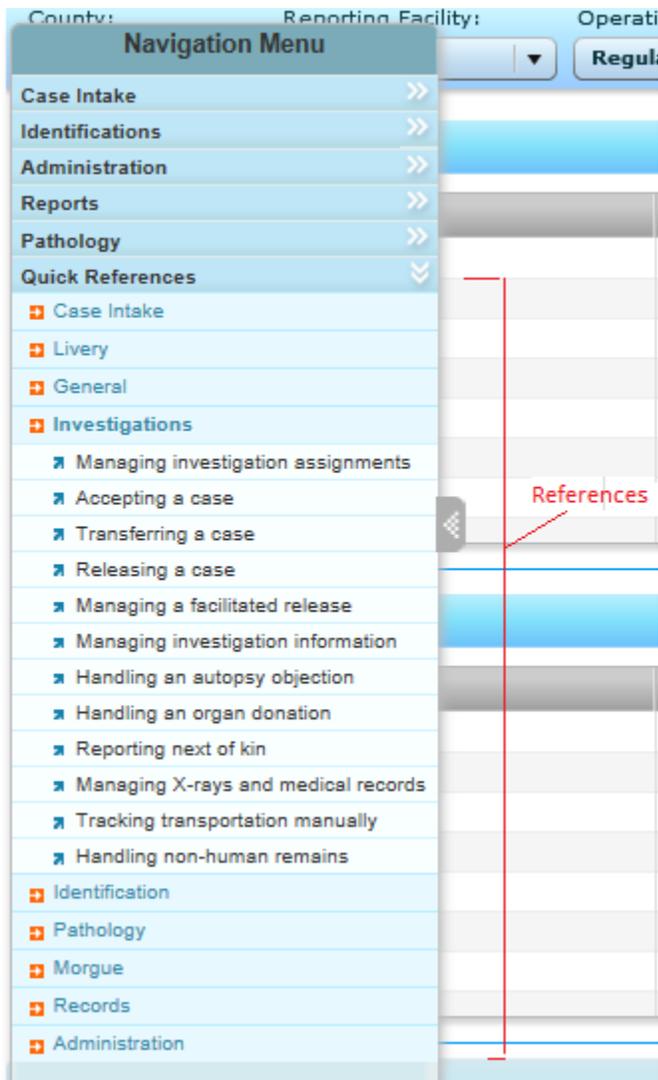
For Phase 1, one session will be held for leadership of the three Forensic Centers. This service will be provided shortly before the modified build is delivered for User Acceptance Training. An ICRA Sapphire consultant will provide a 3 hour morning and 3 hour afternoon session for Tennessee Leadership to acquaint them with the system, and data/resources needed to provide to deploy the system. The Leadership will need to define:

- System users for the Phase
- The responsibilities of a user
- The security permissions for a role, i.e., what data in the system a person performing a task can see
- The configuration of the system dashboard for users
- Contacts for providing data to enable ICRA Sapphire to configure UVIS CMS and set-up Reference Tables. This data will include name, address, telephone, e-mail and fax for:
  - Hospitals in the state
  - Nursing homes
  - Law Enforcement Agencies
  - Courts
  - Livery Services

A similar session will be provided for stakeholders early during Phase 4.

**6. Modify/Adapt Quick Reference Sheet Documentation**

Extensive Quick Reference Sheets are available through the Navigation Menu for all users:

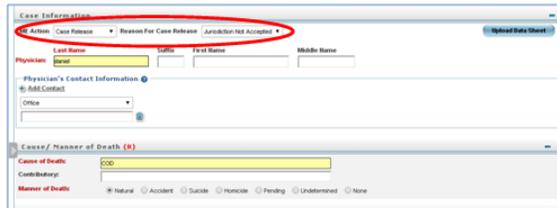


For each module, procedures for business processes are detailed with screen shots. For example, for Investigations, Sheets are available for the specific tasks "Managing investigation assignments," "Accepting a case," etc.

The screen shot reference will be replaced with Tennessee screens, e.g., a current NJ Reference Sheet page:

## Releasing a Case – Quick Reference

1. Select ME Action 'Case Release'.
  1. Reason for Case Release will default to 'Jurisdiction Not Accepted'.
    1. There are two other options (Non Reportable and Non-Human Remains) that can also be selected.



**Note:** The 'Release tab → Case Release' panel will now be displayed and will contain the information entered in the Case Information section of Death Investigation tab.

5. The **Summary** page will be updated with the current **ME Action**.
6. The Investigation status will be set to Accepted and Open.



2. Enter the name of the **Physician** to whom the body is being released.
3. Enter the Cause of Death (COD) and Manner of Death (MOD).

7. Click on the '**Upload Data Sheet**' button which will display a pop-up that will allow you to upload the data sheet. When you are done uploading documents, click the '**Close**' button.

Likewise, the descriptions of procedures will be changed to reflect modifications and new functionality for Tennessee.

## 7. Support User Acceptance Testing

A period, typically three weeks, will be agreed to for User Acceptance Testing of system modifications and additions. Remote support will be provided during normal business hours, Monday-Friday. The support will be provided by telephone, Skype, and Go-To-Meeting sessions. Issues will be documented and tracked to resolution.

## 8. Provide Remote Go Live Set-Up Assistance

Support will be provided remotely to help set-up:

- User accounts
- Role Definition
- County Definitions
- Reference Data
- Business rules
- Notification templates
- Report/letter headers
- Dashboards
- Livery Services

The support will be provided by telephone, teleconference, and Go-To-Meeting sessions.

## 9. Provide Onsite Go Live Support

For Phases 1, 2 and 4, Sapphire will provide two consultants onsite. For Phases 1 and 2, the consultants will be provided for each Forensic Center. For Phase 4, the consultants will be provided for a single location.

**10. Provide System Documentation**

ICRA Sapphire will provide a technical document of the CMS application on completion of UAT. The contents will include –

- Application level design explaining the layered architecture
- Reporting
- Application level administrative modules
- Functional modules
- Overview of the persistence layer
- Integration with external systems
- Special features: Imaging support, device support
- Coding standard
- Source code version control method
- Coding aspects – security and exception handling & code review process
- Deployment diagram
- Installation checklist

**11. Provide Source Code**

The application source code and database scripts will be maintained in a source/version control software such as TFS or SVN installed on ICRA Sapphire servers.

Each developer will check in their part of the development artifacts in the source control system and keep it up-to-date.

All builds of the deployable application will be made from the deployment branch of the source control system.

At the time of source code handover, Sapphire will get a latest copy of the source code from TFS/SVN and hand it over to Tennessee.

**12. Provide Support through duration of Project following Go Live**

Until all counties are operational, Sapphire will provide 24 hour "Break-and-Fix" support as part of this project. It is assumed that Tennessee will be primary support and escalate issues as necessary to Sapphire. Sapphire will provide an acknowledgement within four hours during business hours; otherwise, within 8 hours.

## Section 2

### Services To Be Provided Tennessee: Phase 1-Modify and Deploy UVIS-CMS Regular Operations Functionality at Three Forensic Centers

## Section 2

### Services To Be Provided Tennessee: Phase 1-Modify and Deploy UVIS CMS Regular Operations Functionality at Three Forensic Centers

Based on additional requirements gathering interviews, UVIS CMS will be modified to the requirements of the Forensic Centers and deployed into a Production Environment for Johnson City (including the State Chief Medical Examiner Office), Knoxville and Memphis (Shelby County).

Approximate Duration to Go Live: 5 Months

The Phase 1 cost is based on the following work:

#### General/Dashboard

- **Change Logos, Labels NJ to Labels TN, Document Headers**

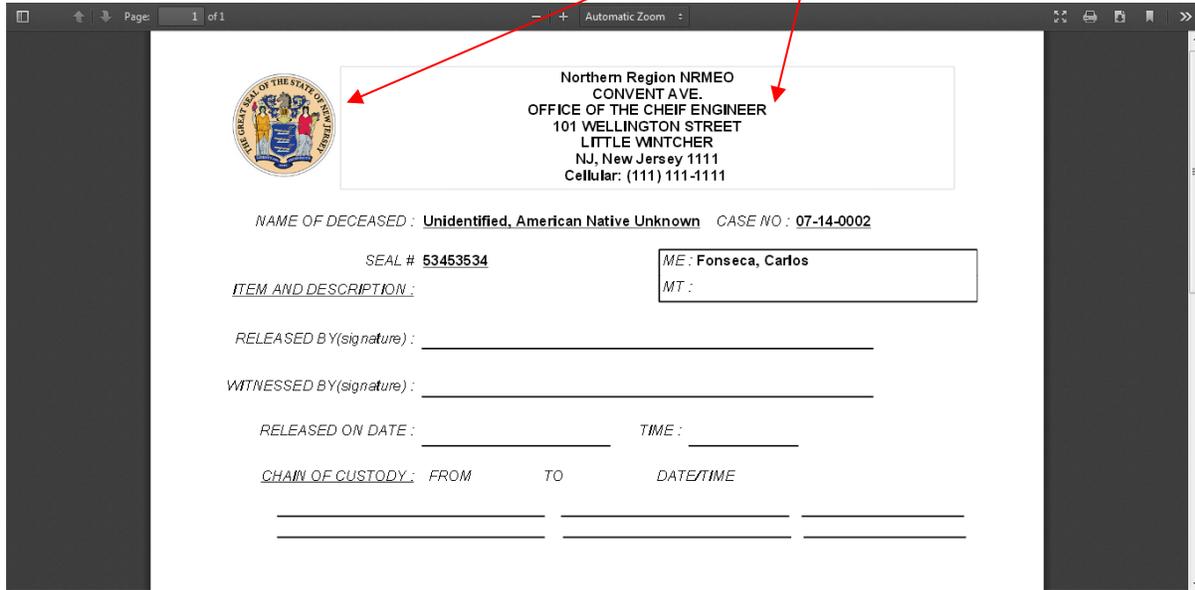
The CMS application contains logos of the ME office of New Jersey, as well as the name 'New Jersey' or 'NJ' in many places.

The logos of the ME's office and all the 21 counties are stored in a folder and the path is stored in the database. The application picks up the appropriate county logo depending on the active county.

The screenshot displays the UVIS Case Management System interface. At the top, there is a navigation bar with the UVIS logo and the text 'UVIS Case Management System'. Below this is a search bar with fields for 'Type Case No.' and 'Type Last Name', and checkboxes for 'Match Exact' and 'Last One Year Cases'. The main content area shows a case record for 'Case No: 07-14-0002 : Unidentified, Americ..... (YY)'. The 'Recovery Seal No' is 53453534. The interface has several tabs: 'Check-In', 'Pre-Exam', 'X-Ray', 'Lab Test Tracking', 'Requested Procedures', 'Post-Exam', 'Check-Out', 'Photos & Documents', and 'Case Notes'. The 'Check-In' tab is active, showing fields for 'Check-In Date: 04/14/2014', 'Check-In Time: 15:31', and 'Checked In By: Yetman, Yvonne'. Below this are sections for 'Items Submitted by Investigator' (Requested and Submitted) and 'Notes/Issues'. A red arrow points to the 'Essex' logo in the top right corner of the main content area. The footer contains the text 'Proprietary material of the New Jersey Division of Criminal Justice, Department of Law and Public Safety', 'Database Version: 4.0.1.0', and 'Site Version: 4.0.1.0 About'.

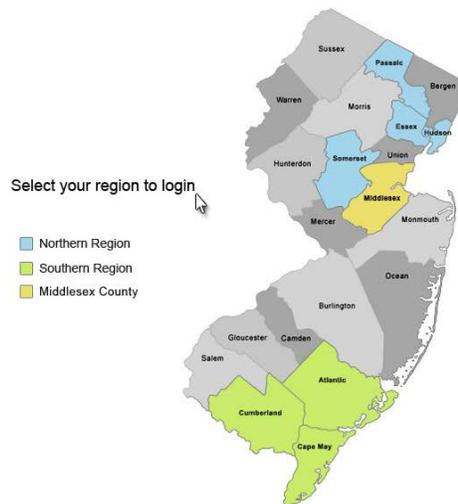
In some places in the application the 'New Jersey' or 'NJ' labels have been used. These will be replaced with 'Tennessee' or 'TN' in the Visual Studio IDE.

Document headers contain the text 'New Jersey' as a label along with the New Jersey logo. These need to change for implementation in Tennessee.



- **Change NJ Logon Photo/Initial State**

The photo in the CMS landing pager (pre-login page) displays a map of New Jersey and allows clicking on different counties to define the user logon page.



On selection of a county, the flow moves to the login page with the appropriate county photograph displayed. The Disclaimer will also need review by Tennessee Legal and possible modification.



DISCLAIMER: You are accessing an application belonging to the State of New Jersey, Department of Law and Public Safety. This application and data contained within is only provided for use authorized by the Department of Law and Public Safety. Unauthorized or improper use of the application or data contained within may result in civil proceedings and/or criminal prosecution.

For the implementation in Tennessee, the following changes have to be incorporated

- The Tennessee map will have to be incorporated in the application with county level demarcation
- County photos will be copied on to a shared folder and the DB table updated with the photo location
- The Disclaimer will also need review by Tennessee Legal and possible modification.

- **Create Case Number Paradigm for State**

Case Numbers automatically assigned by CMS are based on two items – the county and the current year. Case numbers in New Jersey CMS have the following format:

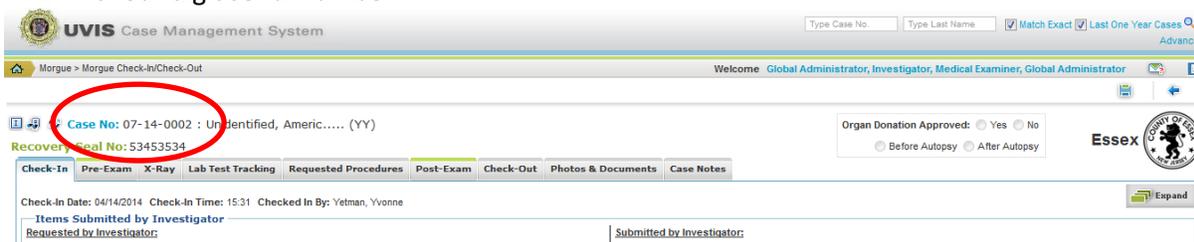
cc-yy-nnnn (sample: 12-14-0007)

where:

cc – is the two digit county code

yy – is the year

nnnn – is four digit serial number



The method of numbering Cases is to be finalized by Tennessee in consultation with Sapphire and the case number generation logic for Tennessee will be incorporated in UVIS CMS.

- **Create new Case Identifier Icons: HIV, one other; Add ROCME Radioactive Identification Functionality**

Some information pertaining to cases that are coming in, may be important to CMS users, particularly those who are actually handling the body such as the ME, the morgue tech and transportation personnel.

The Case Identifier shows the number, decedent Last/First name and, when available, important case information.

**Case No:** 05-14-0267 : KISH, LASZLO (KC) **TENT**

In the example above, "TENT" shows the important case information that the case identification is presently only tentative.

Two important alerts not available in the NJ version are if the decedent had embedded radioactive material or if the decedent was infected with HIV. Tennessee may also define an alert icon.

We will provide these icons beside the case number wherever it is displayed. Should a user forget the significance of an icon, a mouse roll-over will display its definition.

The icons will be set on the Case Intake Screen with checkboxes, e.g.,

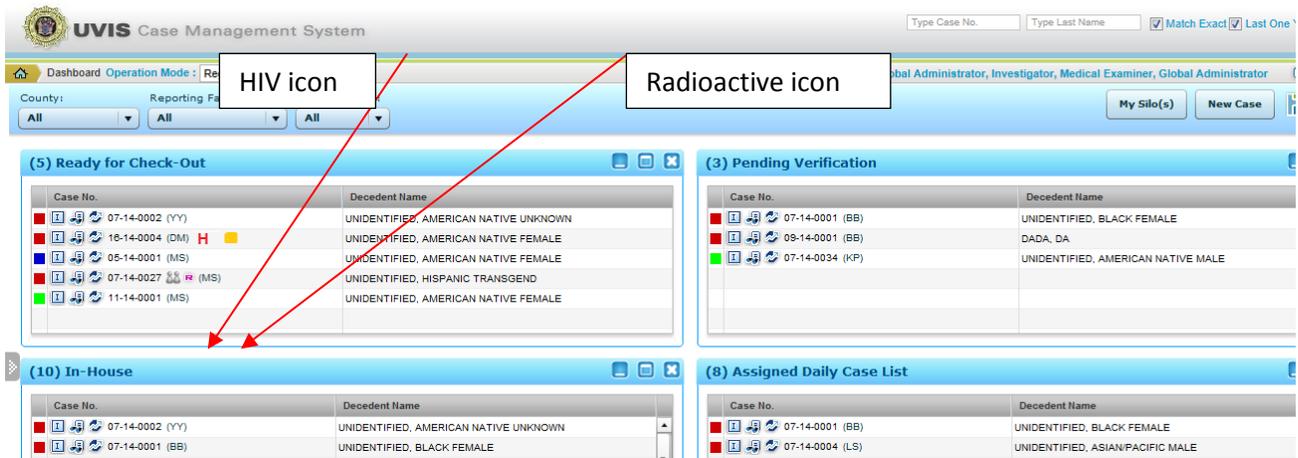
The screenshot shows a 'General' case intake form. At the top, there are three dropdown menus: 'Case Type' (Death Report), 'County' (Hudson), and 'Operation Mode' (Regular). Below these are input fields for 'Last Name' (Smith), 'Suffix', 'First Name', 'Middle Name', and 'AKA'. To the right of these fields are three checkboxes: 'Tentative', 'HIV', and 'TBD'. Red arrows point from the 'Tentative' checkbox to the 'TENT' icon in the case number example above. Further down, there are dropdown menus for 'Gender' and 'Race', and a 'Marital Status' dropdown. Below that are fields for 'Date of Birth', 'Age', 'Age Unit', and 'Social Security Number'. A radio button group is labeled 'Originally Reported as Deceased?' with 'Yes' selected. At the bottom, there are input fields for 'Personal Physician' (Last Name, Suffix, First Name, Middle Name) and 'Personal Physician's Phone Number'.

When the box is checked, the icon will be displayed. More than one icon can be displayed per case.

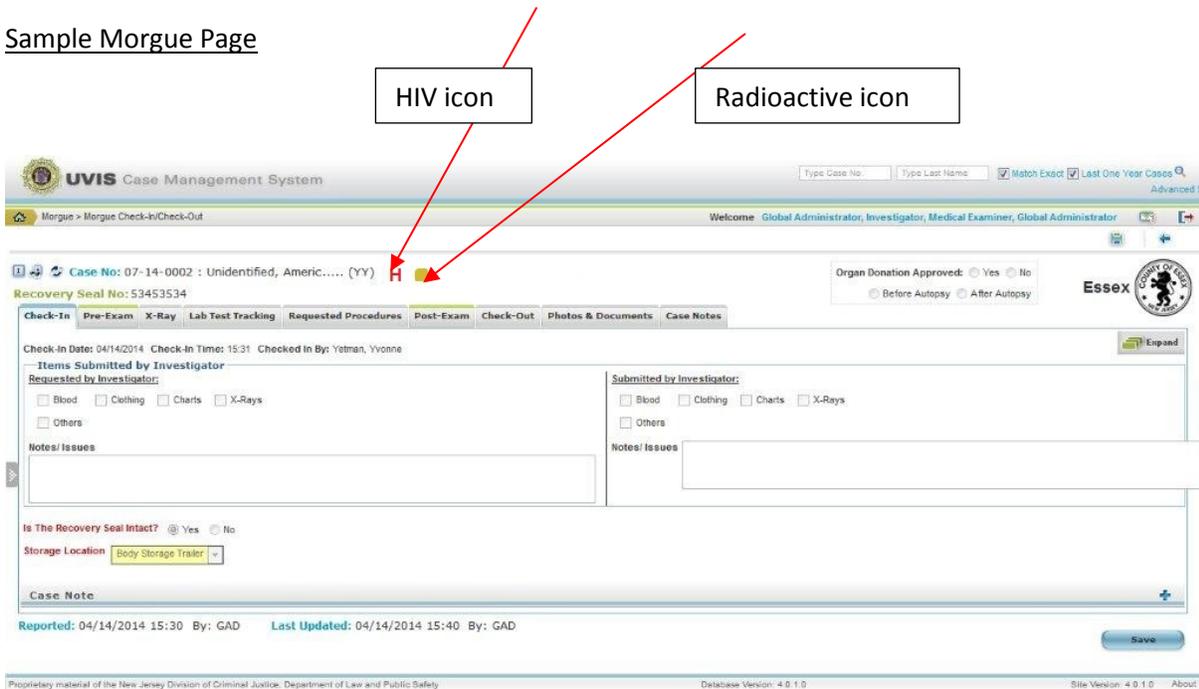
The presentation of the checkboxes may be moved by Tennessee as part of the final specification.

The checkbox can be checked at any time, i.e., after the initial case intake is complete.

Changes will be needed in the dashboard and the master page where the case number is displayed:



### Sample Morgue Page



Additional columns will be introduced in the appropriate tables to store these information.

### Administration Module

- **Modification of Role Screen**

New Jersey is comprised of 21 counties. The screen layout in many pages/screens assumes 21 counties and has been designed accordingly. Tennessee consists of 95 counties. The NJ CMS screens will not be able to display 95 counties in a user friendly manner with the same design. There will be usability issues. To accommodate Tennessee's 95 counties the screen design has to change in the following areas –

- Role screen

- User screen
- Livery screen
- Reference data
- Notification template

The current NJ CMS screens look like this –

### ROLE Screen

Roles Administration

Search Criteria  
 Role Name   Active Only  Inactive Only  All

Role Details

Role Name	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	
Records Administration	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Investigator	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
au	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Anthropologist																							
Health Care Morgue Manager																							
Call Center Supervisor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Communication Center Operator																							
Dispatcher							X		X							X		X					
Remains Transporter	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MP Supervisor																							
Developer																							
Communication Center Supervisor																							
Morgue-Imaging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Morgue Tech	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X-Ray Technician	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Page 1 of 2 Records per page 15

Proprietary material of the New Jersey Division of Criminal Justice, Department of Law and Public Safety Database Version: 4.0.1.0 Site Version: 4.0.1.0 About

Special Role Characteristics  
 Investigator  Dispatcher  Livery  Medical Examiner  Morgue Technician  Administrative Assistant  Lab Technician  Hospital Staff

County

County Name

- Gloucester
- NJ State Case
- Essex
- Mercer
- Warren
- Burlington
- Hunterdon
- Bergen
- Atlantic
- Camden
- Ocean
- Hudson
- Sussex
- Salem
- Passaic
- Somerset
- Cumberland
- Cape May
- Union

Proprietary material of the New Jersey Division of Criminal Justice, Department of Law and Public Safety Database Version: 4.0.1.0 Site Version: 4.0.1.0 About

The NJ CMS supports 21 counties. This screen will not be able support 95 counties as designed.

Roles are associated with different counties. The county drop down in the role screen will need to display the counties in an easier user friendly manner.

## USER SCREEN

Users Administration

**Search Criteria**

First or Last Name:  Role:  County:

Active Only  Inactive Only  All

**User Details**

User Name	First Name	Last Name	Initials	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	Role
lowaccess	Chris	Ward	cw	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Global Administrator
croninl	Leanne	Cronin	LC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Medical Examiner
HayesS	Senatta	Hayes	SH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Morgue Tech
hartg	Gina	Hart	GH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Super User
uricolie	Eugene	Uricoli	EU	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Investigator
montgomeryk	Kenneth	Montgomery	KM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Dispatcher, Secretary
Capital	Capital	Service	CLS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Livery
scottl	Lindsey	Scott	LS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Investigator
walkerl	Linda	Walker	LW	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Secretary
wilsonr	Roselle	Wilson	RW	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Dispatcher, Secretary
shaughnessy	Joann	Shaughnessy	JS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Lab Technician
ViolaR	Roseanne	Viola	RV	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Administrative Assistant
cicalas	Steve	Cicala	SC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Investigator
MTech	Morgue	Technician	MT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Morgue Tech
mazoned	Dennis	Mazone	DM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Investigator, Global Administrator

Page 1 of 7 Records per page 15

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The problems with the User screen are same with that of the Role screen and their resolution will be similar.

## REFERENCE DATA

Reference data allows a user to modify parts of the system, such as drop-down lists and pop-ups.

Select Reference Data Tables

Select Module:

Common	Identifications	Case Intake	Morgue
Color	Activity Log Note Type	Details	Autopsy Table
Country	Appointment Status	High Priority	Clothing Type
County	Appointment Type	<b>Records</b>	Currency Type
County and Department wise	Blood Type	Chargeable Request Agency	Document Type
Color Code	Build Type	Payment Mode	Evidence Type
Currency Denomination	Cosmetic Surgery Location	Procedure Wise Consultant	Funeral Home(Out of State)
Department	County Burial Item	Reason For Test	Livery Person
Funeral Director	Eye Color Type	Requested Tests	Personal Item Type
Funeral Home	Eye Status	Role	Storage Location
Hazard Type	Facial Hair Color	<b>Call Centre</b>	
Incident Report Type	Facial Hair Type	Employment Sub Type	
Item Type	Family Assistance Center	Employment Type	
Item	Governmental Organization		
Jewelry Type	Grade		
Lab	Hair Accessory		
Law Enforcement	Hair Style		
Livery Services	Health Status		
Medical Facility	ID Prints Authority		
Nursing Home	Identity Paper Type		
Organ/Tissue Donor	Medical and Other Entity		
Organization	Medical and Other Record Type		
Organization	Medical Condition		
Photo/Document Type	Medication Type		
Priority	Mental Condition		
Pronouncer Location	Nail Length		
Race	Nail Type		
Reason Detail	Notification Mode		
Reason For No Pronouncement	Notification Status		
Reason Type	Obient in Body Type		

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Many of the reference data tables in CMS New Jersey need to be changed as Tennessee is expected to have different parameters. In addition, the actual data (e.g., Nursing Homes) will need to be changed.

## NOTIFICATION TEMPLATE

The screenshot shows the 'Notification Templates' page in the UVIS Case Management System. It includes a search criteria section with fields for Delivery Type, County, Search Text, and Subject Only. Below this is a table of templates with columns for Delivery Type, Template Name, Subject, Template, and County. A red arrow points from a text box to the 'County' column of the table.

Delivery Type	Template Name	Subject	Template	County
E-Mail	Case Signed and Filed Received	Records Received for Case << Case No >>	Hi,  The following mail have been received for Case Signed and Filed in Transcription for Case : << Case No >>.    Thank you	Essex
E-Mail	High Profile Case Template	High Profile Case Created	Dear Users, High profile case with case number - << Case No >> created. Thanks	Atlantic
E-Mail	Identification Outcome	Identification Modality/Outcome Status	Hi, Identification details has been added/modified for case . Identification Details: Identification Type: << Identification Type >> Source: << Identification By >> Identification Outcome: << Identification Outcome >> Confirmed By ME: << IsIDConfirmedByME >> Case Details: Case No: << Case No >> Decedent : << Case Name >> Place of Death: << Place of Death >> So, please look into this matter. If you are in UVIS CMS, click on the Case No: << Case No >> . If you are not in UVIS CMS and wish to confirm the ID, click on the link below: << Case link to assigned user >>	
E-Mail	Identification Records Received	Records Received for Case << Case No >>	Hi,  The following records (<< ResponseType >>) have been received for Case : << Case No >> Decedent : << Case Name >>, Place of Death: << Place of Death >> and are ready for review.    << ReceivedRecords >>    Thank you	
E-Mail	New Missing Person Report	New Missing Person Report	Your Report number is << Report No >>. Your information will be sent to the New Jersey State Missing Persons Unit. A NJSP MPU detective may contact you. You can refer to your Report Number when visiting the Family Assistance Center.   Missing Person Name : << RM Name >>  Gender : << RM Gender >>  Date of Birth : << RM Date Of Birth >>   Age : << RM Age >>  Kind Regards,  Call Center Operator	
E-Mail	Notification for Investigation X-Ray Completed		Investigation for Case : << Case No >>.    Thank you	
E-Mail	Notification for Mon...		Message for Case : << Case No >>.    Thank you	

In New Jersey, each template is related to a specific county.

Each notification template in New Jersey is connected to one county. This was a very specific requirement for NJ. In Tennessee, a notification template may be used by multiple counties, and the one-to-one relationship will be replaced with one-to-many relationships. The screen and storage in database will have to be changed.

## ACTIVITIES

UVIS CMS is driven by an Business Logic Engine which operates on a set of activities, their prerequisites and status values set by the activities. The workflow of UVIS CMS is guided by the activities. Tennessee ME's office business workflows will be different from New Jersey and there would be major modifications in the activities.

## Case Intake Module

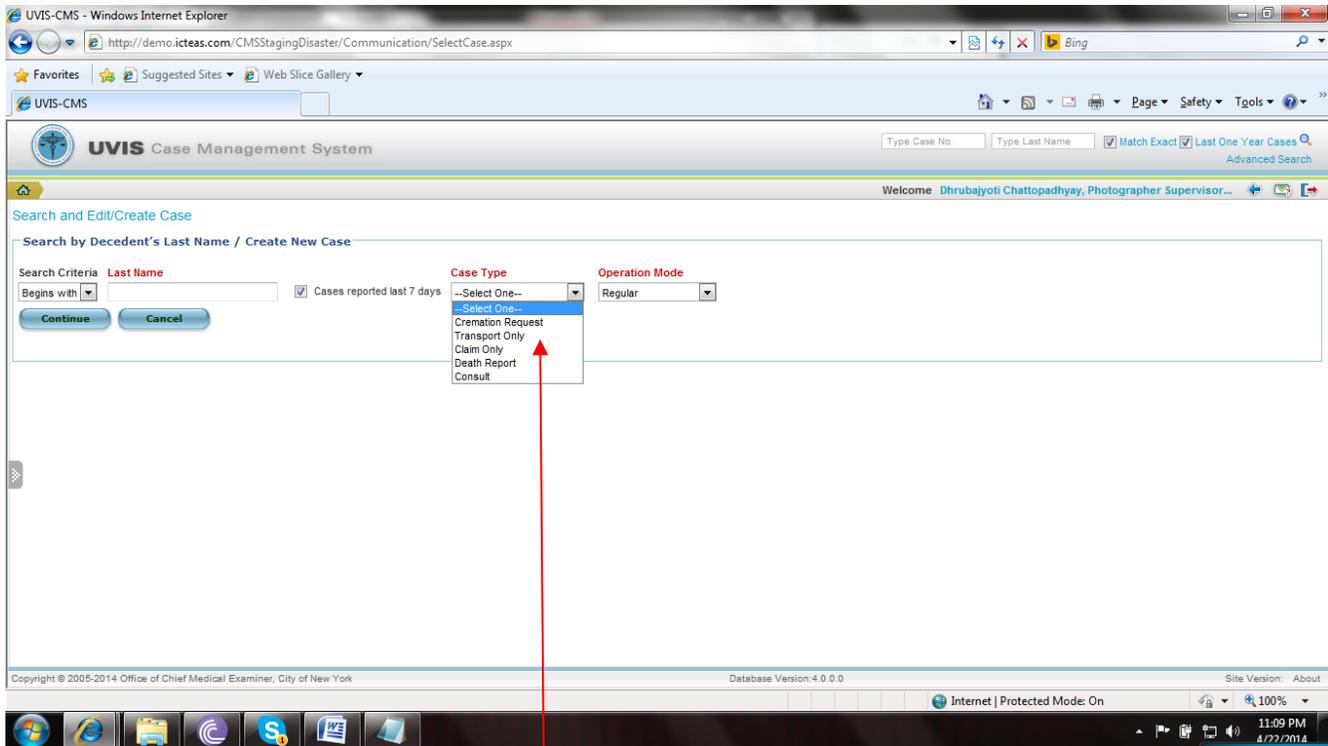
- **Modification of Case Intake screen**

### CASE TYPE

The New Jersey CMS application supports only Death Reports as case type. Tennessee will also require:

- Claim Only
- Transport Only
- Cremation request (can be implemented only when EDRS is integrated with CMS)

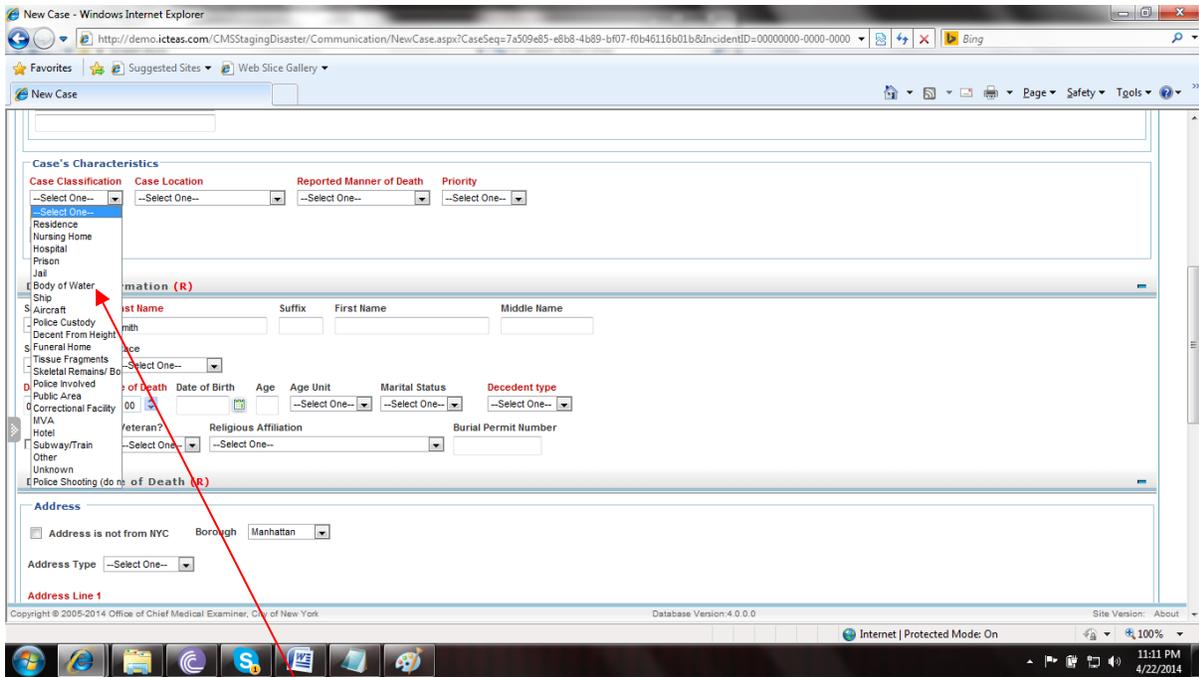
This functionality exists in the NYC OCME UVIS CMS Version. The case intake screens from the New York implementation are reproduced below, with the differences with New Jersey implementation highlighted.



The case type drop down supports three additional type values over the New Jersey implementation. The additional ones are – Cremation Request, Transport only and Claim only. Each Case Type will be mocked up for Tennessee approval before development starts.

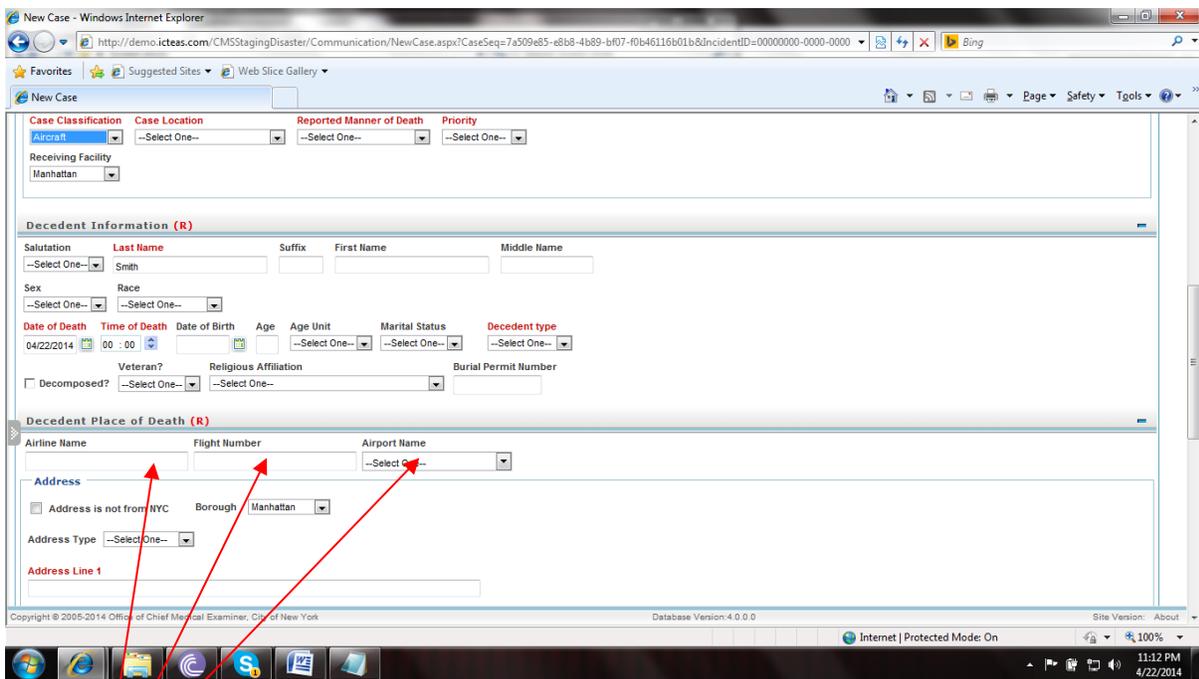
## CASE CLASSIFICATION

While New Jersey does have a full range of classifications for cases, New York City has a larger range. The New York case classification will be adapted in part or full in the New Jersey version to align it to Tennessee requirements. The New York case classification options are shown in Case Intake screen below.



The case classifications drop down in the screen above shows a full list.

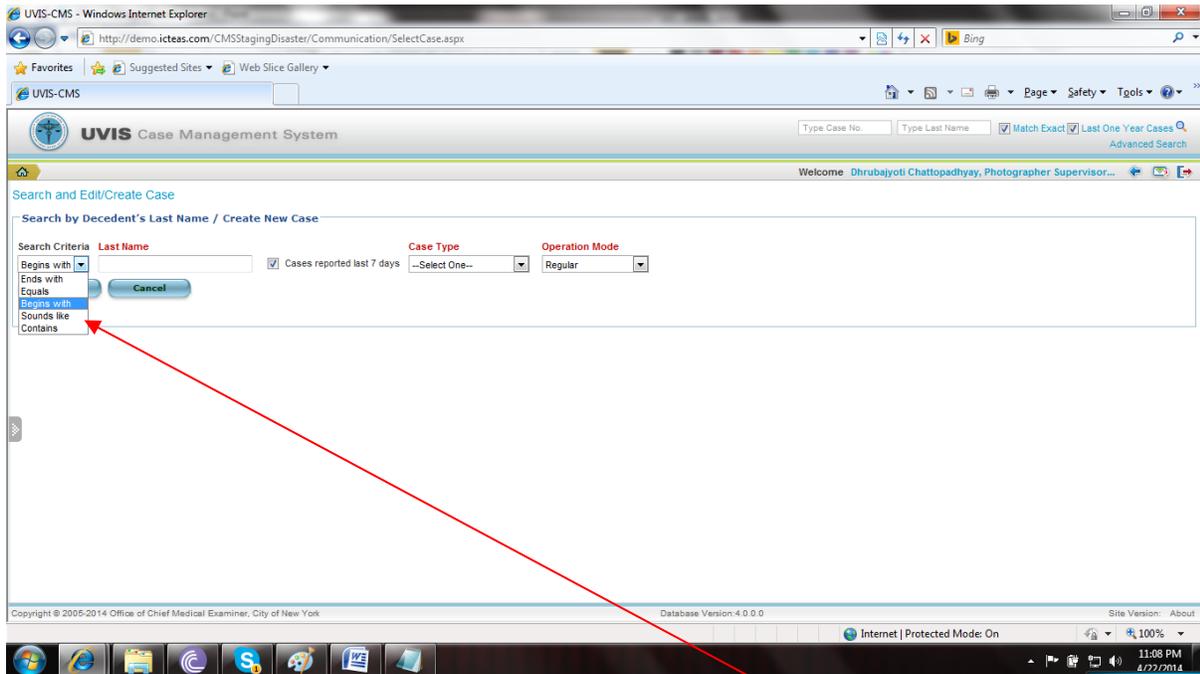
When the classification 'Aircraft' is chosen, an additional set of data fields are displayed as below.



Additional fields appear once the classification 'Aircraft' is chosen.

Each permutation will be checked against Tennessee requirements before development starts.

## EXPANDED SEARCH FACILITY TO CREATE A CASE



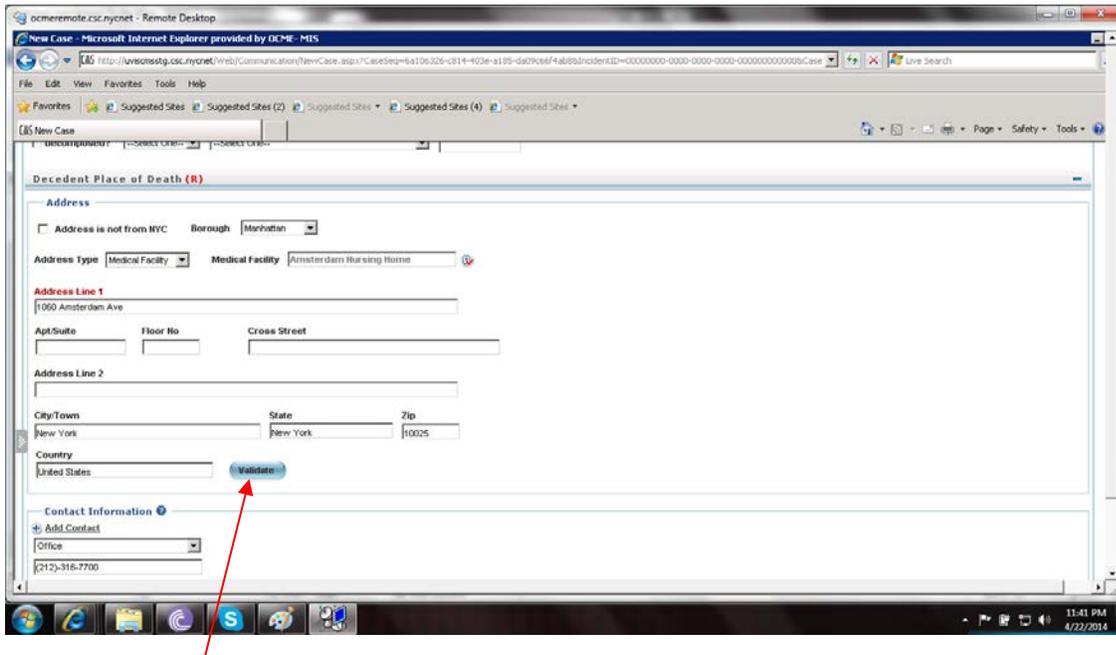
A search facility will have an additional fine tuning option through the 'Begins with' criterion as per the NYC OCME UVIS CMS version.

The NJ Case Creation screen, shown below, will be re-designed to accommodate the change:

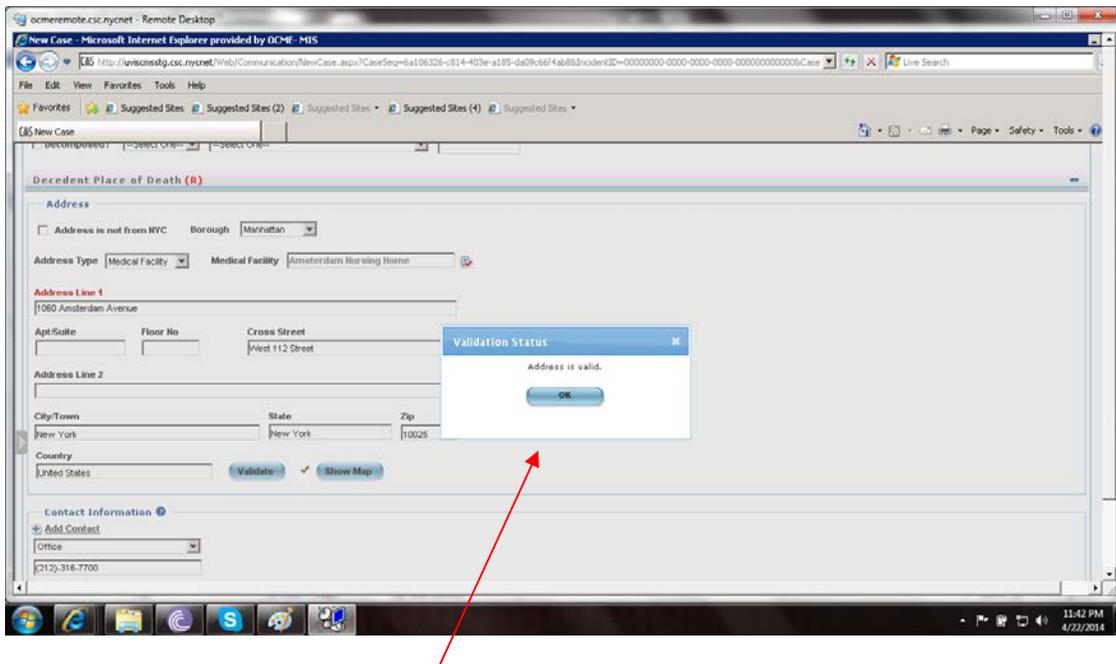
## ACTIVATE ADDRESS VERIFICATION

In the NYC OCME version, addresses can be verified from a government or third party GIS service. This will be implemented using web service calls to the service provider website.

The first screen shows how the verification request is initiated through a 'Validate' button.



Pressing the 'Validate' button initiates validation – UVIS CMS will send a request to the third-party web service for validating the address entered.



The service provider website responds to the request with a success or failure message.

## SUPPORT TRANSPORTING DECEDENT FROM COUNTY TO FORENSIC CENTER

Transportation of the decedent begins at the Location of Death. For Accepted Cases in the NJ base version, the body is transported directly to an ME Office for an Exam. While this transportation also is possible in Tennessee when a death occurs within a Forensic Center county, the more likely scenario is temporary storage at the county and then transportation to the Forensic Center. Both "check-in" segments need to eventually be supported in UVIS CMS. Likewise, check-out can have multiple segments in Tennessee unlike the single point in NJ.

In addition, the Case Number will originate at the county, not Forensic Center, level.

For NJ, UVIS CMS supports a Case Transfer workflow to allow a case to be transferred from one jurisdiction to another. This functionality will be used as the basis to support the transportation of a body from a county morgue/funeral home/hospital to a Forensic Center.

Modifications needed to support the Tennessee workflow are:

1. Provide a user-configurable Reference Data table that identifies the counties associated with each Forensic Center
2. For Phases 1 and 2 (i.e., until Counties come online), modify the Case Intake process so that the initial click of the SAVE button causes a pop-up to display to record the county case number. When ENTER is clicked in the pop-up window, Case Intake data is committed to the database and the user-entered case number assigned.
3. When a county case is Accepted (in the Investigations module, Death Inv tab, Case Information panel, the ME Action = Accepted), assign the next available Forensic Center Case number, but in a smaller font size beneath, show the County Case Number for Reference. Also, make provisions for multiple transportation segments for a case once counties Go Live.
4. The NJ options for transportation will be used:

No Livery Required  Investigator to Transport Body  Livery to Transport Body  Law Enforcement to Transport Body

5. Modify the NJ Checkout tab:

Check-In Pre-Exam X-Ray Lab Test Tracking Requested Procedures Post-Exam **Check-Out** Photos & Documents Case Notes

Remains Picked Up By: Decedent Demographics  
Male, 70 Years, Unknown

Check-Out To:  Funeral Home

Funeral Home Name:

Funeral Home Representative:

Are remains going to another Director?

Personal Valuables Released To Funeral Home

Person Authorizing the Release of the Decedent:

County

Storage Location:

Release Information

Preparing Body To Be Released:  Yes  No

- Support options in addition to Funeral Home: County Investigator, County Livery, Other

- Support printing paperwork as required for interim county transportation
- Record new recovery seal number (if used)

Provision should be made for multiple checkout segments when counties come online in the design of new functionality.

For Phase 1, a decedent will be considered "checked out" when the checkout process at the Forensic Center is complete. (In Phase 3, when counties come online, the dashboard can show when the case is checked out at the county level.)

### Investigations Module

- **Modify and add OCME Special Situations, Fire and other tabs**

The OCME UVIS CMS Regular Operations version differs from the NJ version:

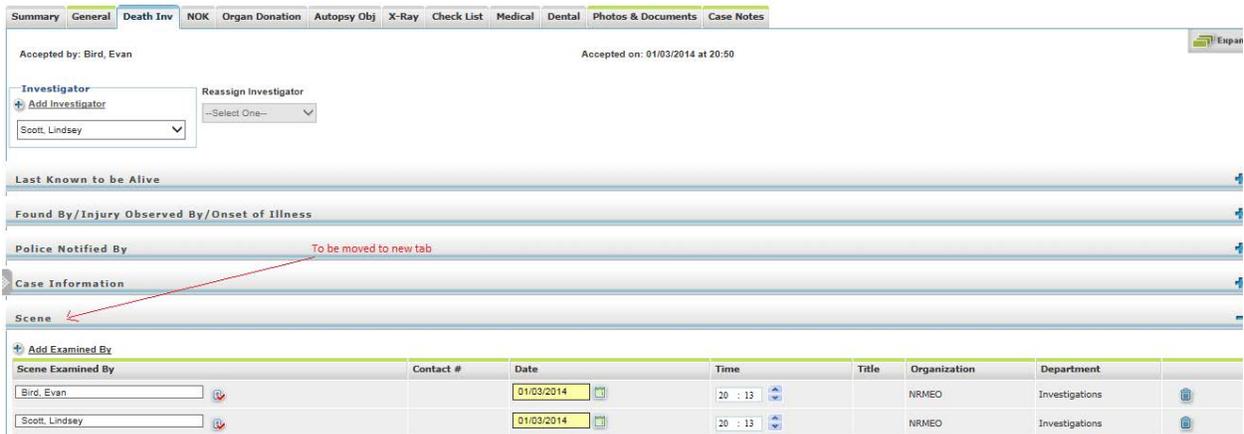
NJ Version:



NYC OCME Version:



From the OCME version, a Scene Investigation tab will be added to the NJ version for Tennessee. From the NJ Investigations, Death Inv tab, the Scene Investigation panel (shown below) will be moved to this new tab.



The OCME Investigation, Scene Investigation, Past Medical History subtabs top two panels ("Obtained From or Inferred By" and "Medical Condition") only will be added (as the remaining data is collected elsewhere in the NJ model):

Summary General Decedent Info **Scene Investigation** Next of Kin Autopsy Obj Special Situations Fire Sign Off Funeral Home Photos & Documents Case Notes

History of Presentation **Past Medical History** Scene Details Physical Examination Personal Property & Evidence

**Obtained From or Inferred By**

Medication/Paperwork       Conversation with Family  
 Conversation with Police Officer       Home Health Aid  
 Other

**Medical Condition**

High Blood Pressure       Heart Problems  
 Diabetes       Seizures  
 Lung Problems       Tuberculosis  
 Psychiatric Illness       Cancer  
 Venereal Disease       AIDS  
 Alcohol Abuse       Drug Abuse  
 Hepatitis       Pregnant in Last 6 Months  
 Other

Did the decedent have a primary care physician?  Yes  No

**Private Physician**

+ Add Physician

Practice:   Primary Physician

The Scene Details subtab will be added in total. The subtab is shown only partially below. The screen is context sensitive and configured in response to user selections. Only the situations available in the OCME version will be added. Any additional situations not available will be considered enhancements which are not included.

http://demo.ictas.com/CMSStagingDisaster/Investig. Update Case x NJ-CMS

History of Presentation Past Medical History **Scene Details** Physical Examination Personal Property & Evidence

Is the location of the scene investigation different than the location of the pronouncement of the death?  Yes  No

Latitude  Longitude  Total Station ID

Indoor  Outdoor

Body in OR pulled FROM water  Body ON Land

Terrace/Balcony       Yard       Courtyard  
 Rooftop       Shed       Garage  
 Street       Roadside       Highway/Expressway  
 Sidewalk       Alley       Park  
 Vacant Lot       Parking Lot       In Motor Vehicle, NOS  
 Open, Vacant Building       Beach       In Trash Container, NOS  
 Outdoor Train Station       Train Tracks       Under Bridge  
 Outdoor Construction Site       Other

Remains Type  Precinct  Decedent Relationship to the scene

--Select One-- Lives along in location

**Scene Description**

Condition of Outdoor Environment  
 Weather Conditions  
 Temperature

Other Scene Conditions (Include Any Environmental Concerns Such As Defective Equipment, Peeling Paint, Infestation or Mold)

Illicit Drugs or ETOH at Scene  Yes  No

**State of Security**

Not Applicable       Buzz-in Entry  
 CCTV Cameras       Door Locked  
 Door Unlocked       Door Open

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2:10 PM 4/22/2014

The Physical Examination subtab will be added in total. The subtab is shown only partially below. Only the situations available in the OCME version will added. Any additional situations not available will be considered enhancements which are not included.

**Summary** **General** **Decedent Info** **Scene Investigation** **Next of Kin** **Autopsy Obj** **Special Situations** **Fire** **Sign Off** **Fun**

**History of Presentation** **Past Medical History** **Scene Details** **Physical Examination** **Personal Property & Evidence**

**Body Position**

**Body Position**

Prone  Supine  Right Side  Left Side  Other

**Head**

Face Up  Face Down  Turned To Right  Turned To Left  Covered  UNK  Other

**Nose & Mouth**

No Obstruction  Obstructed  Partially Obstructed  UNK  Covered  Other

**Possible or Apparent Human Bone/ Tissue**

Body/Nearly Whole Body  Possible or Apparent Human Bone/Tissue

Body/Remains are partially or fully Wrapped/Bound/Concealed

**Post Mortem Changes**

**Rigor Mortis**

Slight  Moderate  Marked  Other

The Personal property and Evidence subtab will be added. The Property functionality will be integrated with the NJ version Morgue, Personal Property functionality. The NYPD reference will be removed.

Summary General Decedent Info **Scene Investigation** Next of Kin Autopsy Obj Special Situations Fire Sign Off Funer

History of Presentation Past Medical History Scene Details Physical Examination **Personal Property & Evidence**

**Personal Property**

Personal Effects

To NYPD

**General Evidence**

Ligature  Suicide or Suicide-Type Note  
 Syringe  Other

**Case Note**

The OCME Special Situations tab supports 9 highly detailed subtabs, which will added as is to the NJ version.

Summary General Decedent Info Scene Investigation Next of Kin Autopsy Obj **Special Situations** Fire Sign Off Funeral Home Photos & Documents Case Notes

Infant Scene **Seizure History** Central Nervous System Hemorrhage(s) Asthma Psych History/Suicide Work Related Death Product Related Death Transport Related Fatalities In Custody Cases

**Prenatal Birth & Postnatal History**

Number of Mother's Pregnancies  Live Births  Still Births   
(Including Decedent)

Total Number of Abortions  Spontaneous  Induced

Number of Deceased Children/Infant   
(Including Decedent)

Prenatal Care?  Yes  No

Was decedent's delivery multiple birth?  Yes  No

The OCME version Fire tab supports two subtabs, both of which will be added:

Summary General Decedent Info Scene Investigation Next of Kin Autopsy Obj Special Situations **Fire** Sign Off Funeral Home Photos & Documents Case Notes

**Fire Medical** **Fire Scene**

**Fire Medical Details**

Date:  Time: 00 : 00

Areas of Body with 1st Degree Burn  Areas of Body with 2nd Degree Burn  Areas of Body with 3rd Degree Burn

**Location of Fire**

Address is not from NYC Borough

Address Type

Primary Address

Only the following changes will be made:

1. The Location of Fire panel will be available only in the Fire Scene subtab

2. The address control will be modified for Tennessee

- **Add data span calculations, e.g., the Last Seen Alive Date was "x" Days before the Found By Date**

The NJ version, Investigations module, Death Inv supports 7 panels where detailed data is recorded:

The screenshot shows the 'Death Inv' module interface with the following tabs: Summary, General, Death Inv, NOK, Organ Donation, Autopsy Obj, X-Ray, Check List, Medical, Dental, Photos & Documents, and Case Notes. The 'Accepted by' field is 'Gardner, Maureen' and the 'Accepted on' date is '01/11/2014 at 06:49'. Below these are fields for 'Investigator' and 'Reassign Investigator', both with dropdown menus. The interface is divided into several horizontal panels: 'Last Known to be Alive', 'Found By/Injury Observed By/Onset of Illness', 'Police Notified By', 'Case Information', 'Scene', 'Case Synopsis', and 'Case Note'.

In the Last Known to be Alive, Found By, and Police Notified By, date and time information are recorded:

This screenshot shows the 'Last Known to be Alive' panel. It includes a 'Copy Contact Info?' dropdown menu, an 'Add Person' button, and a form with fields for 'Last Name' (SMALLS), 'Suffix', 'First Name' (LEVORIS), 'Middle Name', 'Date' (01/10/2014), and 'Time' (23 : 00). The 'Date' and 'Time' fields are circled in red. Below the form is a 'Relationship to Decedent' dropdown menu and a 'Contact Information' section with an 'Add Contact' button, a 'Cellular' dropdown menu, and a phone number field containing '(882) 900-0881'.

This screenshot shows the 'Found By/Injury Observed By/Onset of Illness' panel. It features a 'Select One:' section with radio buttons for 'Found By' (selected), 'Injury Observed By', and 'Onset of Illness'. Below this is a 'Copy Contact Info?' dropdown menu, an 'Add Person' button, and a form with fields for 'Last Name' (SMALLS), 'Suffix', 'First Name' (LEVORIS), 'Middle Name', 'Date' (01/11/2014), and 'Time' (05 : 07). The 'Date' and 'Time' fields are circled in red. There is also a 'Relationship to Decedent' dropdown menu with 'Friend' selected and a 'Contact Information' section with a question mark icon.

The Date and Time will be used to create a summary metric in the upper right area of the screen to show, when data is recorded:

- Days/hours from Last Seen Alive to Found By:
- Days/hours from Found By to Police Called:

- **Expand E-mail and Fax Options for Requesting Medical/Dental Records and Police Reports**

The NJ Investigations and Records modules for Dental and Medical Records, and Police Reports are the same. For Tennessee, all three must be modified to:

1. Modify the user-configurable Law Enforcement Reference table to include fax numbers and fax contact
2. Integrate the UVIS CMS Fax functionality with a single E-Fax service

The NJ Medical Records screen is shown below for reference (Note that Police Report is a new tab scheduled as an Enhancement for NJ):

The screenshot shows a web application interface for 'Medical Practice Outreach'. At the top, there is a navigation bar with tabs: Summary, Document Tracker, Chargeable Request, Lab Test Tracking, Requested Procedures, Court Records, Medical, Dental, Photos & Documents, and Case Notes. Below the navigation bar is a table for 'Medical Practice' with columns: Practice Name, Physician, Informant, Contacted, Requested Date, Received Date, and Available. The table contains one entry for 'Howard, Hall and Yates'.

Below the table is a section for 'Medical Practice Outreach' with an 'Add Physician' button. The form includes fields for 'Medical Practice' (Howard, Hall and Yates), 'Last Name' (Yates), 'Suffix', 'First Name' (John), and 'Middle Name'. There is a 'Contact Person Address' section with fields for 'Address Type' (Office), 'Address Line 1' (2435 Underwood Ave), 'Apt/Suite', 'Floor No', 'Address Line 2', 'City/Town' (Oak Ridge), 'State' (Tennessee), 'Zip' (00000), 'County', and 'Country' (United States). There is also a 'Contact Information' section with fields for 'Email' (richardzj@crasapphire.com) and 'Fax' ((789) 654-4444). Below this are 'Medical Chart Numbers' and several radio button questions: 'Hospital/doctor contacted?', 'Medical records available?', 'Medical x-rays available?', and 'Biological specimens available?'. At the bottom, there is an 'Add' button and a table for 'Contact Actions/Outreach' with columns: Date, Outcome, Notes, By, and Request Action. The table contains two entries for '4/21/2014'.

Practice Name	Physician	Informant	Contacted	Requested Date	Received Date	Available
Howard, Hall and Yates	Yates, John	ID:Richard Zboray	Yes	4/21/2014		Rec, X-R

Date	Outcome	Notes	By	Request Action
4/21/2014	Requested Med Rec		Richard Zboray	Request
4/21/2014	Contacted		Richard Zboray	

Modifications needed are:

1. Change the default state to Tennessee
2. Change the address control

Once contact data is provided, an e-mail request can be sent:

**Request Medical Records**

Medical Practice: Howard, Hall and Yates

**To: Medical Records, Attn.** John Yates

**Email:** richardz@icrasapphire.com

Chart Number:  DOB: 9/26/1968 DOD:

**Requested Information:**

Discharge summary from  admissions  Entire Record

Emergency Room Records  Admission Note  Progress Notes

Pathology Reports  Operative Report  Radiology Reports

Laboratory Results including Toxicology

Other

If the above is not yet available, please send me what is available and the name(s) of the doctor(s) of record.

E-Mail  Fax

**Subject:** Medical Records Needed for CORREY SMITH

**Body:**

The screen will be:

1. Configured for Tennessee requests
2. Provide a formatted e-mail body with the Tennessee user id of the requestor, decedent Case Number, decedent Name, Address, Date of Death
3. For the Police Report, the e-mail will be populated from the Law Enforcement Reference table

Optionally, a fax can be sent:

**Request Medical Records**

Case No: 07-14-0490 : SMITH, CORREY (JC)

Medical Practice: Howard, Hall and Yates

To: Medical Records, Attn. John Yates

Chart Number: [ ] DOB: 9/26/1968 DOD: [ ]

**Requested Information:**

Discharge summary from [ ] admissions  Entire Record

Emergency Room Records  Admission Note  Progress Notes

Pathology Reports  Operative Report  Radiology Reports

Laboratory Results including Toxicology

Other

If the above is not yet available, please send me what is available and the name(s) of the doctor(s) of record.

E-Mail  Fax

**Save** **Close**

The screen will be changed:

1. To reflect requests changes set for e-mail
2. To provide a Print or Send option. If the fax is electronically transmitted from within UVIS CMS, the data and time of transmission will be recorded.

### Morgue Module

- **Capture date/time when personal property is released**
- **Incorporate bar-code scanning functionality for evidence (to be implemented during Phase 2)**

In the morgue module we will be adding a set of fields to capture the date/time when personal property is released to the funeral home.

UVIS Case Management System

Case No: 07-14-0002 : Unidentified, Americ..... (YY)  
 Recovery Seal No: 53453534

Check-Out

Remains Picked Up By: [Field]

Check-Out To:  Funeral Home

Funeral Home Name: [Field]

Funeral Home Representative: [Field]

Are remains going to another Director?

Personal Valuables Released To Funeral Home

Staff Member: Barbto, Beverly

Date/Time Collected: 04/22/2014 23:19

Person Authorizing the Release of the Decedent:  
 Family/Friends  
 Other

Storage Location: Body Storage Trailer

Release Information  
 Preparing Body To Be Released:  Yes  No

Acknowledge Receipt of Body | Print Property Inventory

Decedent Demographics: Unknown, American Native

Essex County Seal

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New date/time field to be added.

## Identifications Module

- Integrate OCME DNA Work Area tab

NJ does not use DNA as an Identifications modality in regular operations:

Summary | Interview | **Work Area** | Photos & Documents | Case Notes

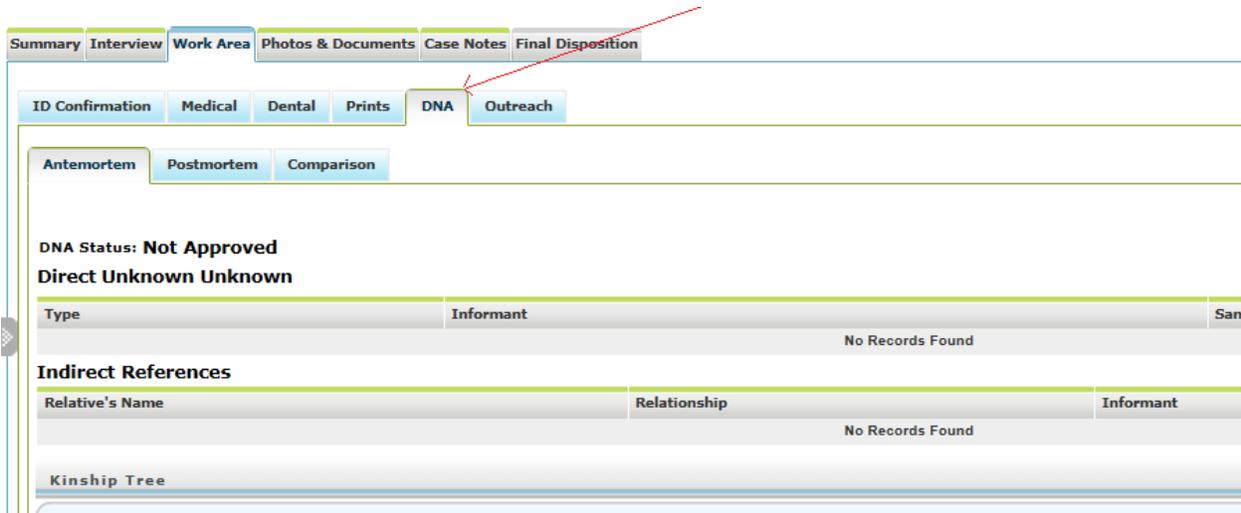
No DNA subtab

ID Confirmation: **Medical** | Dental | Prints | County Referral

Identification Attempts

Modality	Source	Where Identified	Date/Time Of ID	Outcome	ME Con
Photo ID	NJDL	Driver License	12/12/2013 15:51	Identification	<input checked="" type="radio"/> Accept <input type="radio"/> Rejected

The NYC OCME does support DNA collection in regular operations:



The OCME tab will be added as is without changes to the Identifications Work Area tab, between "Prints" and "County Referral".

## **Records Module**

- **Modify Case Summary Tabs**

The Case Summary tab consolidates information entered across the application for easy reference. Duplicate versions are provided in Investigations and Records (since Investigators likely don't access Records and vice versa).

For reference, the NJ Summary tab is shown below:

**Decedent Information**

**Decedent Name:**  
**AKA:**

**Residence:**

Address:  
Apt/Suite: Floor:  
City/Town: Montclair State: Zip Code: Country: United States

**Demographic Information:**

Gender: Ethnicity/Race: Marital Status: I SSN:  
Birth Date: Birth Time: 00:00 Age:  
Occupation: Private Physician:

**Next of Kin Information**

Name	Relationship	Telephone Number

Name: Relationship to Decedent:

**Residence:**

Address:  
Apt/Suite: Floor:  
City/Town: State: Zip Code: Country:

**Contact Information:**

Cellular : (908) 684-6246

**Case Synopsis:**

**Case Information**

**ME Action:**  
**Assigned Investigator:**  
**Physician:**  
**POC at time of Case Intake:**  
**Type of Exam:**  
**Exam End Date/Time:**  
**RIME Status:**  
**Cause of Death :**  
**Manner of Death :**  
**Identification Status:**

**Pronouncing Physician:**  
**Pronounced Date/Time:**  
**Check-Out Status:**  
**Check-Out To:**  
**Check-Out Authorized By:**  
**EDRS Case Number :**  
**Lab Number :**  
**Tissue Number :**  
**Physician To Whom Case was Released :**  
(Applies to Released Cases Only)

The changes to be made are:

1. Add fields to clarify county/Forensic Center relationship
2. Remove RIME Status (Statistical Report for NJ)

- **Create new tab: Reimbursements for ME payments, Toxicology payments; configurable cost table**

A new tab will be created between the Chargeable Requests and Lab Test Tracking tab. For reference, the current NJ Records version is shown below:

**Records and Statistics**

Case No: 16-14-

- Summary
- Document Tracker
- Chargeable Request
- Lab Test Tracking
- Requested Procedures
- Court Records
- Medical
- Dental
- Photos & Documents
- Case Notes

The tab will support two panels:

- ME Reimbursements
- Lab Reimbursements



ME Reimbursements Panel

The NJ Administration, User Account Set-Up screen (shown below) will be modified with a new checkbox column against county to indicate whether the ME is entitled to reimbursements, and if so, for which counties:

**Modify User**

**County Name**

Atlantic	
Cumberland	
Cape May	

**Role**

**Role Name**

Medical Examiner Supervisor	
Super User Admin	
Medical Examiner	
Super User old	
Investigator-Privileges	
Global Administrator	

**User**

**Title** MD  
**User Name** [text field]  
**Password** [password field] **Confirm Password** [password field]  
**First Name** [text field] **Middle Name** [text field] **Last Name** [text field] **Suffix** [text field] **Primary Email** [text field]  
**Department** Pathology **Organization** NRMED **Initials** [text field]  
 Ability to receive X-Ray Notification  Ability to Hold  HP Notification Recipient

**Address**

**Address Type** Office  Address is not from NJ  
**Address Line 1** [text field] **Apt/Suite** [text field] **Floor No** [text field]

In NJ Administration, a new user configurable Reference Data table will be related to record ME Reimbursement Charges.

The panel will show in separate rows for each service performed:

- The ME name (Last, First)
- The Type of service (View, Autopsy, Court Testimony, etc.)
- The Date of Service
- Decedent case number
- Decedent name
- Cost of the Service
- A checkbox to indicate that this service is to be paid
- The date of payment (Default to current date)

Each column will be sortable by clicking on a column title.

The panel will also support a button to generate statements for each ME. The statements will be printed, e-mailed or faxed.

For ME reimbursements, UVIS CMS will automatically populate the Service Date from the Morgue, Exam Complete Date field, and populate the cost from the ME Cost reference table and the Exam Type from the Daily Case List (or, if changed, Morgue, Exam Type). The user will need to enter which service(s) to pay and the payment date.

Once a statement is generated for an ME, those services listed in the statement will be removed from the active list.

Integration with external software systems is not included.

#### Toxicology Lab Reimbursements

The Tox Lab Reimbursements panel will be supported by a user-configurable reference table to record:

- Name of Lab to be reimbursed
- Address of Lab to be reimbursed
- Contact Office Number, Fax and e-mail
- An Service Agreement reference number, if available
- Counties that the Lab/Organization serves

A second user-configurable reference table for Toxicology testing will record:

- Tox Lab Test Services provided by a Lab
- Cost for each test
- Cost routine additional charges (e.g., shipping)

The panel will show in separate rows for each test performed:

- The Lab Name (Clicking on the name will display contact details)
- The specific Toxicology test; each test in an order will be itemized on a separate row

- Date Tox Ordered
- The Date Results Received
- Decedent case number
- Decedent name
- Cost of the Test
- A checkbox to indicate that this Test is to be paid
- The date of payment (Default to current date)

Each column will be sortable by clicking on a column title.

The panel will also support a button to generate statements for each Lab. The statements will be printed, e-mailed or faxed.

For Tox reimbursements, UVIS CMS will automatically populate the Date Tests Ordered, the Lab Name, and the specific tests ordered from either the Morgue module, Lab Test Tracking, Tox Order Form, and Post exam, Exam Complete Date field; or the Records, Lab Test Tracking tab (if additional Tox tests are ordered). UVIS CMS also will automatically populate the cost of each test from the Lab test Cost reference table. Finally, UVIS CMS will automatically populate the date when results are received from the Lab Tests Tracking table and highlight orders that are complete. The user will need to enter which service(s) to pay and the payment date, if different from the current date.

Once a statement is generated for a Lab, tests in the statement will be removed from the active list.

Retained Tox will not be tracked in Reimbursements. If the status is changed from Retained to Test, the Test will be tracked.

Integration with external software systems is not included.

- **Modify Records, Court Records to Track Date of Testimony/Seal Records**

The NJ Court Records tab shows legal-related information:

The screenshot displays the 'Court Records' tab in a web application. The interface includes a top navigation bar with the following tabs: Summary, Document Tracker, Chargeable Request, Lab Test Tracking, Requested Procedures, Court Records (active), Medical, Dental, Photos & Documents, and Case Notes. Below the navigation bar, the 'Court Records Information' section is visible. It features an 'Add Court Record' button and a form with the following fields: Subpoena Date, Court Date, Court Time (set to 00:00), Court Location, Judge, and Assistant Prosecutor. Below this form are sections for 'Work Conference' (Add Work Conference), 'Pretrial Conference' (Add Pretrial Conference), 'Participant List' (Add Participant List), 'Deposition' (Deposition Name: --Select One--, Deposition Date, Phone), 'Testify' (Add Testify), and 'Comments'.



For the existing NJ reports, Sapphire will adapt to Tennessee requirements. For example, the reports can be selected for user-selected counties and the selection grid will be changed for the reports:

**Homicide Cases**

**Case Intake Date and Time**

From   To  

---

**County**

Essex       Cape May       Salem       Atlantic       Hunterdon       Monmouth  
 Hudson       Cumberland       Morris       Bergen       Mercer       Ocean  
 Passaic       Camden       Sussex       Burlington       Middlesex       Union  
 Somerset       Gloucester       Warren

Samples of three "pre-canned" NJ reports are shown below:

Autopsies and Views Breakdown for the Period from 04/01/2014 to 04/22/2014

		<i>Natural</i>	<i>Accident</i>	<i>Suicide</i>	<i>Homicide</i>	<i>Pending</i>	<i>Undetermined</i>	<i>None</i>		<i>Totals</i>
04/2014	Autopsy	4	3	0	5	21	0	0		33
04/2014	View	9	1	1	0	1	0	2		14

**Morgue Totals**

	January	February	March
<b>Total Bodies Checked In:</b>	22	8	26
<b>Accepted Cases Checked Out:</b>	28	9	22
<b>Total Non-Human Remains Cases Accepted:</b>	0	0	0
<b>Total Cases Referred to County Burial in Reporting Month:</b>	0	0	0

Lab Tests Tracking Report for 04/01/2014

<i>Lab Name</i>	<i>Lab Test Name</i>	<i>April</i>	<i>YTD</i>
STATE TOXICOLOGY LABORATORY	Blood Cultures	0	2
STATE TOXICOLOGY LABORATORY	Histology	1	40
STATE TOXICOLOGY LABORATORY	Stat Carbon Monoxide	0	2
STATE TOXICOLOGY LABORATORY	Tissue Culture (Bacterial)	0	1
STATE TOXICOLOGY LABORATORY	Toxicology	1	58
STATE TOXICOLOGY LABORATORY	Vitreous Electrolyte	0	2
	<b>Lab Total</b>	2	105
	<b>Total</b>	2	105

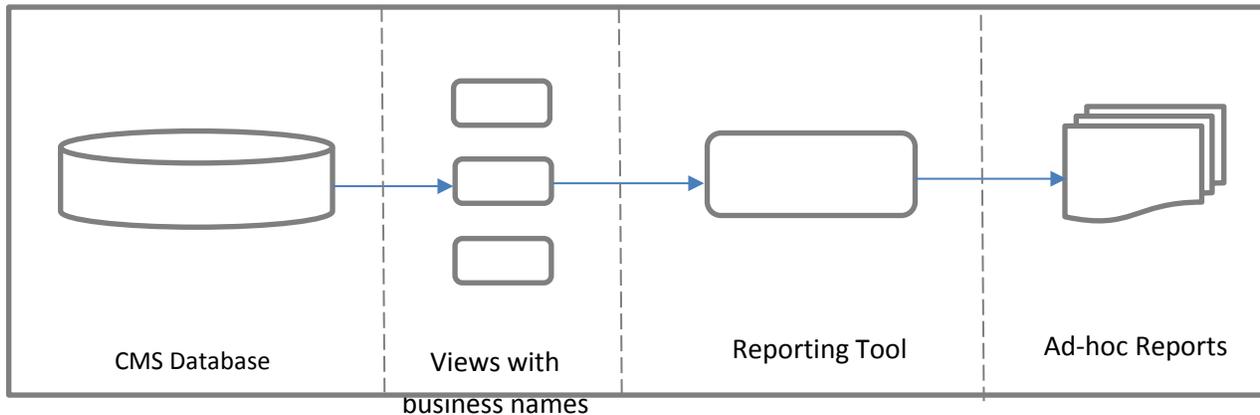
## **Ad Hoc Reporting**

A facility for creating ad-hoc reports has been provided in New Jersey CMS. CMS exposes data to users through database Views and the users use Crystal Reports (a reporting tool from SAP) for designing and generating reports.

For the Tennessee Project:

- A completely new set of database Views will be created to include data from all major business functions
- The column names in the View would have meaningful business names to increase usability
  - o Example: a column in the main database table which is called 'DispositionSeq' can be renamed as 'MedicalExaminerAction'
- Add capability to use other reporting tool like SQL Server Reporting Service

Any user familiar with Crystal Reports or SQL Server Reporting services would be able to generate Ad-hoc reports.



## **Provide 3-days onsite training per each Forensic Center**

ICRA Sapphire will provide a trainer knowledgeable in the Tennessee version of UVIS CMS to provide training at individuals' Forensic Centers. UVIS CMS will be accessed from training computers via web access. Users will use a pre-production version of the system and enter data in real time under the trainer's guidance.

ICRA Sapphire assumes Tennessee will provide computers for trainees and a projector at the Forensic Centers.

Training will be provided by roles and organized into sessions based on attendee availability. Some users will attend more than one session.

### *Role: Case Intake*

What is Covered During Training:

## Logging into the application

- Using the Dashboard
  - o Using the filters
  - o Setting up Silos
  - o Searching for Cases
- Creating a new case
  - o Checking if a case has been previously reported.
  - o Unidentified decedents
- Taking the information for a new case:
  - o Becoming familiar with the layout of the Case Intake screen
  - o Identifying required fields
  - o Selecting reporting facilities
- Generating the Case Number
- Assigning the case to an Investigator
- Sending out notifications about High Profile cases

Maximum number of individuals who can be taught in a session: 10

Length of training session: 1 – 2 hours

## *Role: Investigator*

### What is Covered During Training:

- All of the information covered during the Case Intake session
- Describing the information contained on the Summary screen
- Working through the workflows for each of the following situations:
  - o Accepting a case
    - Assigning a case to Livery
    - Indicating information Livery is required to enter
  - o Releasing a case to a physician
    - Capturing the information about the physician to whom the body is to be released
    - Capturing Cause and Manner of Death
    - Uploading the Investigators Data Sheet
    - Getting Medical Examiner approval for the release

- Performing a Facilitated Release (where the Medical Examiner signs the Death Certificate because the personal physician will not)
  - Capturing the information about the physician to whom the body is to be released
  - Capturing Cause and Manner of Death
  - Uploading Documents
    - Investigators Data Sheet
    - Facilitated Release sheet
- Transferring a case to another county
- Claim Only Case
- Transport Only
- Cremation Request
- Working with the Case Synopsis
- Adding Next of Kin
- Describing the process for indicating Organ Donations and Autopsy Objections
- Requesting in-house X-Rays
- Requesting Medical and Dental Records
- Working with Photos and Documents

Maximum number of individuals who can be taught in a session: 4 - 6

Length of training session: 2 - 3 hours

*Role: Morgue Technician*

What is Covered During Training:

- Describing the working for processing a decedent through the morgue
- Verifying the information entered by Livery
  - How to indicate a problem and send out appropriate notifications
- Recording the Property Inventory of a decedent
- Requesting additional X-rays
- Recording that specimens are being sent to a lab (internally or externally) for testing
- Requesting additional procedures/consults
- Completing the exam
- Checking a case out to a Funeral Home

- Indicating that remains are being transported out-of-state
- Recording the individual authorizing the release of the body
- Working with the Acknowledge Receipt of Body form

Maximum number of individuals who can be taught in a session: 4 - 6

Length of training session: 1 – 2 hours

*Role: Medical Examiner*

What is Covered During Training:

- Overview of Morgue Technician role
- Working with the Daily Case List
  - Unassigned
  - Assigned
    - Assigning Morgue Technicians
    - Adding notes
  - Hold Overs
- Indicating the following
  - Lab Tests to be performed (including the implications for other modules)
  - Indicating Cause and Manner of Death
    - Specifying the specific Categories of Unnatural Death

Maximum number of individuals who can be taught in a session: 4 - 6

Length of training session: 30 minutes – 1 hour

*Role: Administrative Assistant*

What is Covered During Training:

- Understanding the Summary screen
  - Adding EDRS Number
  - Adding Label Number
- Tracking the following
  - Autopsy / View reports
  - Toxicology tests
  - Histology tests

- Recording requests for documents and/or photos
  - o Generating an invoice for a request
- Tracking the status of specimens sent to labs for testing
- Tracking the status of requested additional procedures/consults
- Tracking and Documenting Court appearances
- Tracking the status of requests for Medical and Dental records

Maximum number of individuals who can be taught in a session: 10

Length of training session: 1 – 2 hours

*Role: Administrator*

What is Covered During Training:

- Adding Users and Roles
- Adding and Modify Reference data
- Notification Templates
  - o Creating and modifying them
  - o Adding them to Activities
- Understanding Activities
- Setting up the Physician On Call
- Setting up the Dashboard for specific users
- Setting up Livery services

Maximum number of individuals who can be taught in a session: 1 - 2

Length of training session: 2 – 3 hours

*Role: Livery*

What is Covered During Training:

- Logging into the Mobile application
- Using the Mobile application
- How to update the status of the case/body so it is ready for check-in using the application
- Checking a body into the Morgue/Hospital.

Maximum number of individuals who can be taught in a session: 10

Length of training session: 30 minutes

## **Phase 1 Services/Deliverables Breakdown with Key Milestones**

### **Subphase 1**

- a. Prepare Project Plan
  - b. One three-day visit for data collection
  - c. One two-day visit for follow-up data collection
  - d. Remote Interviewing
  - e. Preparation of Functional Specification for Modifications
- Milestone: Specification Sign Off by the State*

### **Subphase 2**

- a. Development and QA of Modifications
  - b. Monthly Reviews of Work In Progress via Go-To-Meetings
  - c. Delivery of UVIS CMS modified for 3 Forensic Centers (assumes Tennessee deploys)
  - d. Three days of onsite training for User Acceptance Testing users
- Milestone: Completion of Training for User Acceptance Testing*

### **Subphase 3**

- a. Remote Support for User Acceptance Testing
  - b. Delivery of modified Quick Reference Sheets
  - c. Completion of 3 week User Acceptance Testing
- Milestone: Completion of User Acceptance Testing*

### **Subphase 4**

- a. One onsite, one-day overview for Leadership
  - b. Delivery of Training
  - c. Provide remote Go Live Set-Up Assistance
  - d. Provide two consultants for two days onsite for Go Live support at each Forensic Center (6 total days)
  - e. Provide System Documentation
  - f. Provide Source Code
- Milestone: Go Live at third Forensic Center*

## Section 3

### Services To Be Provided Tennessee: Phase 2-Modify, Enhance and Deploy UVIS CMS Regular Operations Functionality at Remaining Two Forensic Centers

Based on additional requirements gathering interviews, UVIS CMS will be modified to the requirements of the two remaining Forensic Centers (those in Nashville and Chattanooga) and deployed into a Production Environment, as well as enhanced for all Forensic Centers.

Approximate Duration to Go Live: 5 Months

The Phase 2 estimate is based on the following work:

#### General/Dashboard

- **Change logos and state/country references from NJ-based to Tennessee-based**

Same as in Phase 1

- **Create new functionality to track and alert for incomplete work**

Following silos will be created to track unfulfilled requests i.e. for which requests has been sent but full response not yet received

- Pending Dental Request
- Pending Medical Request
- Pending Police Request
- Pending DNA Request
- Pending Prints (Fingerprints and Footprints) Request

Also a report will be developed wherein all category wise (Dental, Medical, Police, DNA and Prints) Cases with unfulfilled requests details will be available. This report will have filtering capability to print specific category or all categories and can be automatically e-mailed, if required.

#### Pathology

- **Integrate with EDRS (assumes EDRS to be available for integration no later than January 1, 2015)**

Integration with EDRS has pre-requisites. One is the generation of Death Certificates from the CMS application (which is not available in the NJ version but is in the NYC OCME one) and another is establishing the protocol for communication and automated interaction with the Electronic Death Registration System (EDRS).

It is assumed EDRS integration will be possible by January 1, 2015 and Tennessee will facilitate the integration. Sapphire will participate in planning as early as Tennessee wishes, but to fulfill deadlines, the planning should not commence later than October, 2014.

## Overview

Once customized and implemented, CMS will be capable of generating Death Certificates which are to be prepared and signed by the Medical Examiners. The death certificate will then be electronically transmitted to the appropriate electronic death registration system of the state or city. A registered copy of the Death Certificate when transmitted back from the EDRS, will be incorporated into CMS. The registered copy of the death certificate is the one that will be handed over to the Funeral Director or next of kin of the decedent.

CMS will also provide facilities of amending or correcting a death certificate and then getting the amended copy registered again.

CMS will communicate with the state EDRS through exchange of XML files.

The detailed workflow and features will depend on the data interchange facility offered by the EDRS system.

The major areas and their features will be:

### Death Certificate

- Create
- Search
- Amend/Correct
- EDRS integration
  - o Outbound communication from CMS
  - o Inbound communication to CMS

### Create Death Certificate (DC)

The Add/Edit Death Certificate page opens consist of three tabs- Death Certificate Information, Personal Particulars and Race and Ancestry Details.

The **death certificate tab** will contain the following panels –

- Place and time of death
- Cause of death
- Injury details
- Medical examiner's supplementary report

The OCME screen below will be adapted to Tennessee requirements:

**Death Certificate**

Death Certificate Information | Personal Particulars | Race and Ancestry Details

Expand

Decedent Legal Name: Unknown, Unknown  Unknown

Confirmed  Unconfirmed  Pending  Presumed  Refuted

Place and Time of Death +

Cause of Death (R) +

Injury Details (R) +

Medical Examiner's Supplementary Report +

Save

Some fields in this screen will be auto-populated from data already captured in CMS, e.g., Date, time, sex etc.

As an example, the cause of death input panel will be:

**Cause of Death (R)**

Manner of Death  Autopsy

Immediate Cause 1:  Interval 1:

Immediate Cause 2:  Interval 2:

Immediate Cause 3:  Interval 3:

Other significant conditions contributing to death including operation info.:

The base OCME Injury details input panel –

**Injury Details (R)**

Want to Pre-populate all the fields:  Police Story  MLI Report

Injury Date <sup>?</sup>   Unknown  Injury Time   Unknown  At Work

Place of Injury

Location

**Address**

[+ Add Address](#)

Address is not from NY Borough

Address Type   Primary Address <sup>?</sup>

Address Line 1  Apt No  Floor No

Address Line 2  Cross Street  City/Town

State  Country  Zip

The base OCME Medical Examiner's supplementary report example –

**Medical Examiner's Supplementary Report**

If Female   If pregnant with one year of birth, outcome of pregnancy

Date of Out   Cleared for Cremation if Family Requests

Did tobacco      Reviewed By

The base OCME **Personal Particulars** tab –

**Death Certificate**

Death Certificate Information | **Personal Particulars** | Race and Ancestry Details

**Personal Particular Details**

R-12-000027 Unknown, Unknown !

**Address**

+ Add Address

Address is not from NY      Borough --Select One--      **Validate**

Address Type --Select One--       Primary Address

Address Line 1      Apt No      Floor No

Addressline2      1      1

Address Line 2      Cross Street      City/Town

a      a      New York

State      Country      Zip

New York      United States      1

Check here to include personal particulars on certificate(uncheck to hide them).

The base OCME **Race and Ancestry Details** tab –

**Death Certificate**

Death Certificate Information | Personal Particulars | **Race and Ancestry Details**

**Race and Ancestry**

R-12-000027 Unknown, Unknown !

**Medical Examiner's Supplementary Report**

Ancestry:       Race (check one or more)

Hispanic?:

White       Black or African American

American Indian or Alaska Native

Asian       Chinese       Filipino

Japanese       Korean       Vietnamese

Other Asian

Hawaiian       Guamanian or Chamorro       Samoan

Other Pacific Islander

Other

**Save**

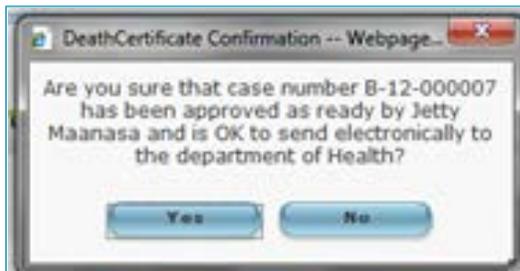
The UVIS CMS code for the OCME model must be integrated with the NJ version.

## Integration with EDRS system

Step 1: Generating XML from death certificate – to generate XML check the DC that needs to be sent to EDRS

New Death Certificate (26 items)			Amended/Corrected Death Certificate (0 items)		
Case ID	Decedent Name		Case ID	Decedent Name	
R-12-000032	declastname, decfirstname		<b>No Record(s) Found</b>		
R-12-000028	dfgdfg,				
R-12-000027	Unknown, Unknown	✓  			
Q-12-000036	last,				
M-12-000164	Unknown, Unknown				
M-12-000157	sds,	✓  			
M-12-000151	Smith, Will				
M-12-000141	Brown, John				
KB-11-000062	Taylor, Lillian				
KB-11-000061	Taylor, Samuel				

A confirmation dialog will show up –

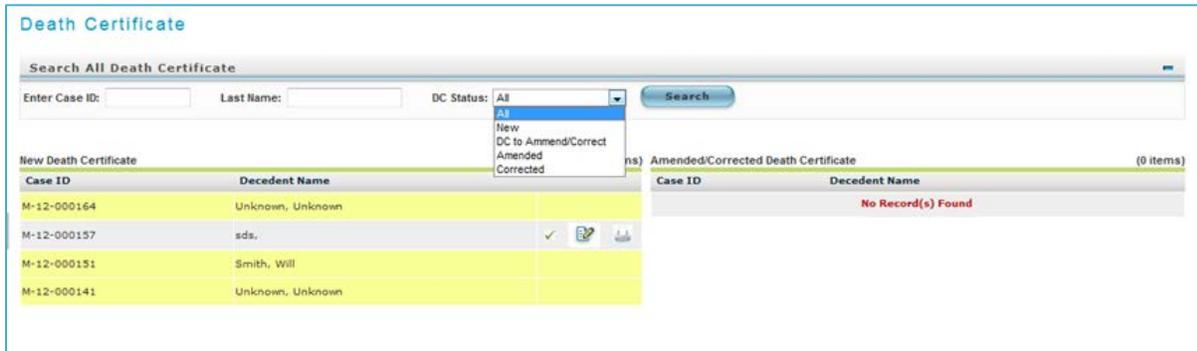


XML will be generated once the Yes button is clicked and a confirmation message will be displayed –

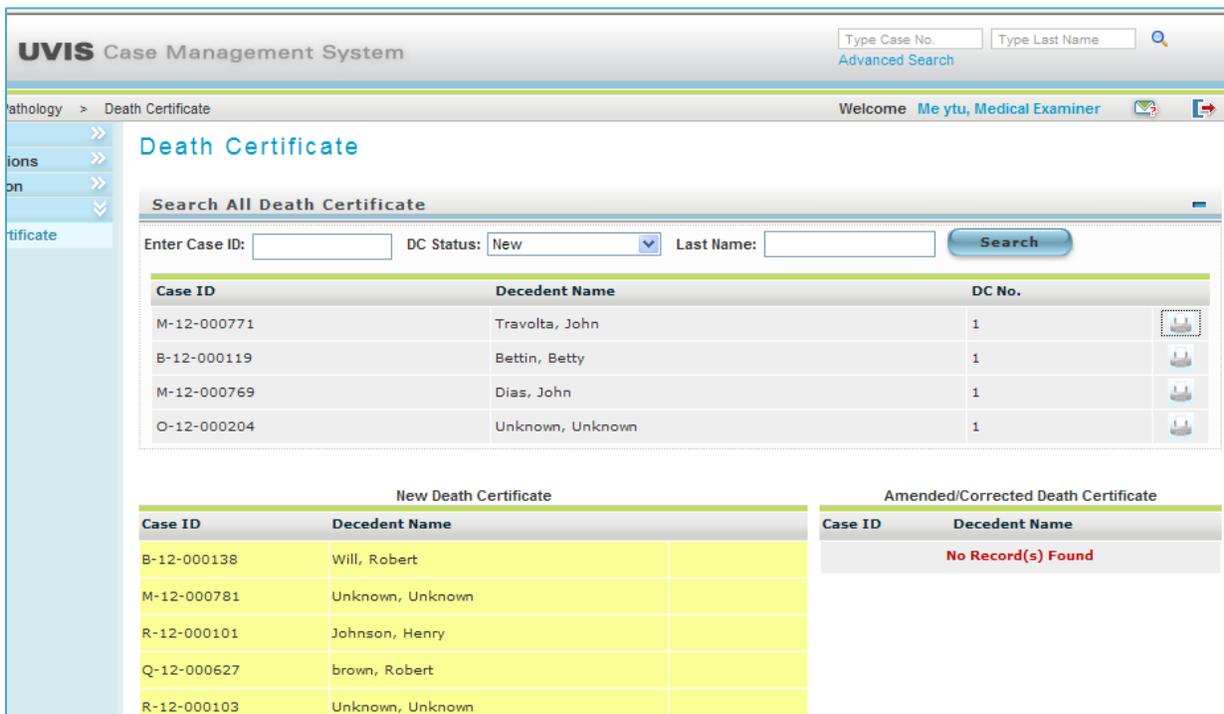


Death Certificate Search screen

DCs will be searchable by their status – ALL, New, Amend/Correct, Ammended/Corrected



DCs will also be searchable by the Case Number –





- Provide new functionality to create and track the development and review of Autopsy Reports within CMS (using design work prepared for OCME as a basis)
- Print Autopsy Report packages

Sapphire will build a new function to create the development and review of Autopsy Reports from within CMS.

When an Autopsy is completed, the case will be moved to the Autopsy Report silo but be displayed in italics to indicate that the transcription of the audio has yet been received. In Records, Document Tracker, the date the audio is sent for transcription will be manually entered.

The base NJ version does not offer tabs in the Pathology module:



Tabs will be added for a Summary (same as for Records and Investigations) as well to support the Creation/Amendment of a DC, the development/amendment of the Autopsy Report, and a Diagram Library, e.g.,



The Autopsy Report will be integrated with and autopopulate fields in the NJ version Records, Document Tracker tab:

Case No: 09 : EZ, JUAN (EB)

Summary Document Tracker Chargeable Request Lab Test Tracking Requested Procedures Court Records Medical Dental Photos & Documents Case Notes

Report Requested

Expand 

**Case Information**

ME Action: Accepted	Pronouncing Physician:
Assigned Investigator:	Pronounced Date/Time: 01/03/2014 at 19:35:00
Physician:	Check-Out Status: Pending
POC at time of Case Intake:	Check-Out To:
Type of Exam: Autopsy	Check-Out Authorized By:
Exam End Date/Time: 01/04/2014 at 11:55:43	EDRS Case Number :
RIME Status: Closed	Lab Number :
Cause of Death : ETHANOL INTOXICATION, AMENDED, LA	Tissue Number :
Manner of Death : Accident	Physician To Whom Case was Released :
Identification Status: Identified	(Applies to Released Cases Only)

Assigned Administrative Assistant(s)

+ Add Administrative Assistant

Exam Type : Autopsy

Document	Date	By	Comments
Transcribed Rough Draft 	1/13/2014	Luz Amador	<div style="border: 1px solid #ccc; width: 150px; height: 100px; margin: 0 auto;"></div> <input type="button" value="Import Transcript"/>
Rough Draft Returned for Trans 	2/27/2014	Neida Oller	
Edited Draft For Sign 	2/27/2014	Katalina Suarez	
Signed Report Returned for Trans 	3/19/2014	Neida Oller	
To ME for Review 	--Select One--		
To ME for Approval 	Thoma	Neida Oller	
Case Returned Approved 	2/28/2014	Neida Oller	
Case Signed and Filed 	3/20/2014	Luz Amador	

Histology 

1. The Document workflow will be changed to Tennessee requirements
2. A new button, IMPORT TRANSCRIPTION, will be added to upload the transcription. On SAVE:
  - a. The Transcription will be automatically inserted in the Autopsy Report. The Transcript must be in MS Word or another editable format (*not* pdf)
  - b. A notification will be sent to the ME that the report is ready for work
  - c. In the Autopsy silo, the case display will be changed from italics to regular
  - d. The date for Received Transcription (new) will autopopulate with the current (but it can be changed). It is not necessary to record time.
3. A new area will be added for Amending the Autopsy report

The new Autopsy tab in Pathology will support, based on the planned NYC OCME tab, the preparation and amendment of the Autopsy Report:

Summary **Autopsy Report** Death Certification Diagrams Photos & Doc. Case Notes

Autopsy Report

1 2 3 + Add Report

Previous Page Next Page

Rich text editor toolbar with options for Bold, Italic, Underline, Bulleted List, Numbered List, Indent, Outdent, Undo, Redo, Text Color, Background Color, Link, Unlink, Table, and other formatting tools.



OFFICE OF CHIEF MEDICAL EXAMINER  
CITY OF NEW YORK



REPORT OF AUTOPSY

Name of Decedent: **ROBERT** M.E. Case # **M-11-14523**  
 Autopsy Performed by: **DR. SAMPSON** Date of Autopsy: **11/11/2010**

**FINAL DIAGNOSES**

- I. LIGATURE STRANGULATION AND SHARP AND BLUNT FORCE TRAUMA OF THE HEAD, NECK, AND TORSO, WITH:
  - A. LIGATURE STRANGULATION, WITH:
    - i. LIGATURE FURROW AROUND NECK
    - ii. PERIOCLAR CONJUNCTIVAL PETECHIAE
    - iii. FRACTURES OF HYOID BONE AND THYROID CARTILAGE
    - iv. STRAP MUSCLE HEMORRHAGES
    - v. DERMAL ABRASIONS OF CHIN AND NECK
    - vi. LIGATURE RECOVERED
  - B. SHARP FORCE TRAUMA OF HEAD, NECK, AND TORSO, WITH:
    - i. DERMAL INCISED WOUNDS (SEVEN)
    - ii. SINGLE AND PAIRED STAB WOUNDS (TWENTY-TWO), WITH:
      - a. PERFORATIONS OF LEFT INTERNAL JUGULAR VEIN AND LIVER
      - b. PENETRATIONS OF RIGHT LUNG AND AORTA
      - c. HEMOTHORAX (50 ML)
      - d. HEMOPERITONEUM (70 ML)
  - C. BLUNT FORCE TRAUMA OF HEAD, NECK, AND TORSO, WITH:
    - i. DERMAL ABRASIONS AND CONTUSIONS
    - ii. SUBDURAL HEMORRHAGE (30 ML)
    - iii. LACERATIONS AND INTRAMUSCULAR HEMORRHAGES OF TONGUE
    - iv. MULTIPLE RIB FRACTURES
    - v. NEUROPATHOLOGY REPORT PENDING
- II. ATHEROSCLEROTIC AND HYPERTENSIVE CARDIOVASCULAR DISEASE, WITH:
  - A. CARDIAC HYPERTROPHY (340 GM)
  - B. MARKED CALCIFIC CORONARY ARTERY ATHEROSCLEROSIS
  - C. MARKED CALCIFIC AORTIC ATHEROSCLEROSIS
  - D. MODERATE NEPHROARTERIOCLEROSIS
- III. DIABETES MELLITUS (ANAMNESTIC)
- IV. CHRONIC SUBSTANCE ABUSE (ANAMNESTIC), TOXICOLOGY PENDING

Add Photo Add Diagram Insert Text Send for Review Finalize Save Amend

Peer Review

+ Add Reviewer

Sent to	Title	Date Sent	Comment
Name			
Name			

Generate

1. A user configurable Autopsy Report template will be developed. Once the template is defined, Sapphire will work with Tennessee to identify fields that can be autopopulated from captured information in CMS
2. The ADD PHOTO/ADD DIAGRAM buttons will insert an uploaded Photo or Diagram from the case's Photo & Documents tab at the insertion point set by the cursor position on the displayed page.
3. The INSERT TEXT button will launch a pop-up: PRIVATE LIBRARY/PUBLIC LIBRARY. The ME will be able to insert pre-defined, reusable text with this capability.
4. SAVE will save the current version.
5. Multiple version can be developed which will be accessed from the numbers at the top of the screen:



### Autopsy Report



6. Since the Report will be template driven, only one page will be displayed at a time:



7. The REVIEW button will control the Review Process:

Sent to	Title	Date Sent	Comment
Name <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Name <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- When first clicked, SEND FOR REVIEW enables the Peer Review panel and enters the current date for DATE SENT. The user can change the date.
- From a pre-defined, user configurable Reference Table list, the ME will select one or more doctors for the Review.

- On SAVE, e-mail notifications, with a link to the page, will be sent to the referenced MEs with a pre-defined message.
  - The data will automatically be shown in the Records module, Document Tracker.
  - +Add Reviewer can be clicked to add another Reviewer.
8. The FINALIZE button will create a pdf copy of the Autopsy Report. The pdf version will be added to Photos and Documents as FINAL AUTOPSY REPORT. FINALIZE also will send a notification to designated Admins that the Autopsy Report is complete and can be sent to fulfill Requests (as recorded in Records, Requested Documents).
  9. The GENERATE button will be used to print an Autopsy Report Package
  10. The Amend Button will be used to amend the Report.
  11. Two new options will be available on Navigation menu, Pathology for Public Autopsy Report Library and Private Autopsy Report Library:



The options will be used to open and manage the Private and Public Autopsy Libraries of reusable text. The organizations of the Libraries will be user configurable.

- **Add Body Diagrams to e-mail**

A new library of Body Diagrams will be developed. The Body Diagrams will be managed by two new options from the Navigation menu: Public Library and Private Library:



The Public Library will store Diagrams available to all users.

The Private Library will Diagrams available to only the signed in user.

A Diagram can be moved between the Libraries.

The Diagrams will be uploaded into UVIS CMS with the tag either: DIAGRAM-PUBLIC or DIAGRAM-PRIVATE. The tag will determine in which Library the DIAGRAM is stored.

Completed Diagrams will be uploaded into UVIS CMS and stored in the case's Photos & Documents tab.

A checkbox option will be included in relevant e-mails to include Diagrams will be selected from the Photos & Documents tab.

### **Records**

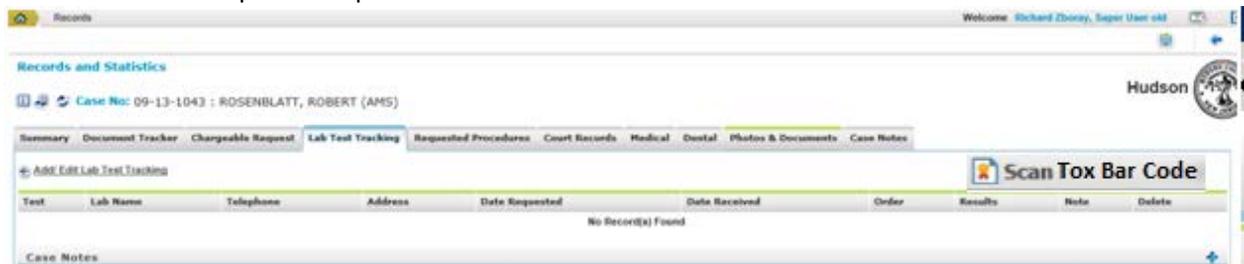
- **Create new functionality to prompt when to discard retained Tox/stock jars: provide bar code scanning to ensure right one discarded**

The NJ UVIS CMS version does not currently support bar coding scanning in regular operations.

For Tox Label printing, bar codes will be added based on the NYC OCME model.

A new, user configurable "destroy retained TOX date" reference table will be added. The date will specify the duration the TOX sample is to be retained in days. A background process will run each day to list out the Tox samples to be destroyed on that and the next 2 days.

A user will use the option to open the screen where the results will be listed.



The user will scan the Tox specimen label and the Retained Test will be highlighted. On ENTER, the DATE RECIEVED will be automatically set to the current date and the ORDER column will be set to DESTROYED.

- **Fulfill requests for Autopsy Reports via e-mail and print**

In the NJ UVIS CMS version, the Records module, Chargeable Requests tab tracks Requests for Autopsy Reports:

1. A new column will be added to the detailed tracking table at the bottom: Fulfillment. The column will offer the choices: Mail, Fax, E-mail. Once selected, the choice will be checked to ensure the proper Contact has been provided. If not, the user will be prompted to enter it.
2. The user will continue the workflow by generating an Invoice, and recording the payment.
3. When the Autopsy Report is set to FINAL, a notification that the Report is available will be e-mailed to designated Admins via e-mail with a link to the Chargeable Requests page. The Report Complete box (see top arrow) will also be checked.
4. A new button will be added to e-mail requested items. The button will display a pop-up of all requested items available to be sent for the case with a list of requestors, if more than one.
  - a. If a Contact e-mail has not been entered, the user will need to enter one before the e-mail can be sent.
  - b. In the case of an Autopsy Report, a Certification Letter also will be signed. Tennessee will provide the heading and copy for the letter.
  - c. If e-mailed, the Note (bottom table) will document the date, time and recipient for the e-mail. For privacy, only one recipient can be listed per e-mail fulfillment.
5. When the e-mail is sent, the DATE SENT will automatically be added to the bottom and Summary tables, completing the workflow.

6. The GENERATE REPORT button will be expanded to print the Autopsy Report. It, it prints the Certification Letter.

**Provide 3-days onsite training per each Forensic Center**

ICRA Sapphire will provide a trainer knowledgeable in the Tennessee version of UVIS CMS to provide training at the remaining two Forensic Centers. UVIS CMS will be accessed from training computers via web access. Users will use a pre-production version of the system and enter data in real time under the trainer's guidance.

ICRA Sapphire assumes Tennessee will provide computers for trainees and a projector at the Forensic Centers.

Training will be provided by roles and organized into sessions based on attendee availability. Some users will attend more than one session.

Training will consist of the Training as outlined for Phase 1, plus training to use enhancements. In addition, Go-To-Meeting Training sessions will be held to train users at the original Forensic Centers the enhanced capabilities.

## **Phase 2 Services/Deliverables Breakdown with Key Milestones**

### **Subphase 1**

- a. Prepare Project Plan
  - b. One three-day visit for data collection
  - c. One two-day visit for follow-up data collection
  - d. Remote Interviewing
  - e. Preparation of Functional Specification for Modifications
- Milestone: Specification Sign Off by the State*

### **Subphase 2**

- a. Development and QA of Modifications/Enhancements
  - b. Monthly Reviews of Work In Progress via Go-To-Meetings
  - c. Delivery of UVIS CMS modified/enhanced for 5 Forensic Centers (assumes Tennessee deploys)
  - d. Three days of onsite training for User Acceptance Testing users
- Milestone: Completion of Training for User Acceptance Testing*

### **Subphase 3**

- a. Remote Support for User Acceptance Testing
  - b. Delivery of modified/new Quick Reference Sheets
  - c. Completion of 3 week User Acceptance Testing
  - d. One onsite, one-day overview for Leadership
  - e. Delivery of Training
    - 1. New Two Forensic Centers
    - 2. Original 3 Forensic Centers of new enhancements only via Go-To-Meeting (up to 4 sessions of 2 hrs each)
  - f. Provide remote Go Live Set-Up Assistance
  - g. Provide two consultants for two days onsite for Go Live support at each Forensic Center (4 total days)
- Milestone: Go Live at fifth Forensic Center*

## Section 4

### Services To Be Provided Tennessee: Phase 3: Modify and Deploy UVIS CMS Regular Operations Functionality at 95 Counties

Based on additional requirements gathering interviews, UVIS CMS will be modified to the requirements of the 95 Medical Examiner County offices with a minimal number of alternative models defined, developed and deployed into the Production Environment.

We assume 5-6 offices will Go Live each month.

Duration: 20 months

The Phase 3 estimate is based on the following work:

#### General/Dashboard

- **Change logos and state/country references from NJ-based to Tennessee-based**

Same as in Phase 1 and 2

#### Administration

- **Modification of County screens to allow limited number of workflow variations for reference data and processes across the application**

Need to make all Admin more sensitive to County variations, e.g., will need a new reference table to identify which Forensic Center serves which counties.

Also in County screen we will make provision to upload individual icons and login screen images for individual counties to enable the application to display the County-wise login screens. Those icons and images will be saved in the database and can later on modified by admin users.

- **Suppress Physician On Call (POC) functionality for counties**

It is assumed that some county offices may not have a Physician On Call (POC). In County screen, a checkbox will be available to denote whether POC functionality is applicable for that county or not and should be available / not available in the application menu.

#### Investigations

- **Suppress livery assignment as user configurable county option**

In County screen, another checkbox will be available to denote whether Livery functionality is applicable for that county or not. Based on that value, Livery functionality will be available or hidden for that county.

- **Support per county models variations in:**
  - **Case Release**
  - **Facilitated Release**

- **Transfer Cases**
- **Special State Investigation Cases**
- **County burial**

Variations will be accommodated to create up to five three models per category.

### **Morgue**

- **Develop alternative (limited number) Check-in/Check-out models for counties**

Functionality will be developed that will enable cases to be checked-in under the respective counties, then checked-out for subsequent check-in to a Forensic Center. Once Autopsy / View is completed in the Forensic center, the case will be checked-out and sent back to the respective county, where it will be checked-in again. Finally the case will be checked-out to the Funeral Director or County Burial from the county Morgue.

- Add ability to identify place of body storage (e.g., funeral home name)

A county may not have its own morgue, e.g., bodies may be stored in a Funeral Home, Mortuary of a Medical Facility. In county reference data, we will store the specific types of morgue that will be used by the county office.

### **Phase 3 Services/Deliverables Breakdown with Key Milestones**

#### **Subphase 1**

- a. Prepare Project Plan
- b. One three-day visit for data collection
- c. One two-day visit for follow-up data collection
- d. Remote Interviewing
- e. Preparation of Functional Specification for Modifications

*Milestone: Specification Sign Off by the State*

#### **Subphase 2**

- a. Development and QA of Modifications for regular operations alternative models
- b. Monthly Reviews of Work In Progress via Go-To-Meetings
- c. Delivery of modifications and deployment at five counties
- d. 1 1/2 day of onsite training at the five county offices for User Acceptance Testing

*Milestone: Completion of User Acceptance Testing at Fifth County*

#### **Subphase 3**

- a. Deployment of UVIS CMS to 25 counties (assumes Tennessee performs deployment; Sapphire supports remotely)
- b. Delivery of "Train-the-Trainer" Training: two four day sessions
- c. Provide remote Go Live Set-Up Assistance
- d. Provide two consultants for one day onsite for Go Live support at two locations

*Milestone: Go Live of 25th County Office*

#### **Subphase 4**

- a. Deployment of UVIS CMS to 25 counties (assumes Tennessee performs deployment; Sapphire supports remotely)
- b. Provide remote Go Live Set-Up Assistance
- c. Provide two consultants for one day onsite for Go Live support at two locations

*Milestone: Go Live of 50th County Office*

#### **Subphase 5**

- a. Deployment of UVIS CMS to 25 counties (assumes Tennessee performs deployment; Sapphire supports remotely)
- b. Refresher Delivery of "Train-the-Trainer" Training: one four day session
- c. Provide remote Go Live Set-Up Assistance
- d. Provide two consultants for one day onsite for Go Live support at two location

*Milestone: Go Live of 75th County Office*

Subphase 6

- a. Deployment of UVIS CMS to remaining counties (assumes Tennessee performs deployment; Sapphire supports remotely)
- b. Provide remote Go Live Set-Up Assistance
- c. Provide two consultants for one day onsite for Go Live support at two locations

*Milestone: Go Live of Final (95th) County Office*

## **Section 5**

### **Services To Be Provided Tennessee: Phase 4- Modify and Deploy Disaster Operations Functionality**

The Phase 4 estimate is based on the following work:

1. Gather and Detail Modification/Enhancement Requirements
  - Interviewing
  - Prepare written specification for approval
  - Prepare screen mock-ups as needed
  
2. One Onsite Visit (3 days) to demo the baseline Disaster Functionality to Tennessee stakeholders so that modifications can be identified. The demo will early in the Phase. The demo to include:
  - a. Incident Set-Up
  - b. Call Center
  - c. Family Assistance Center
    - i. Credentialing
      1. Driver License
      2. Passport
      3. Other
    - ii. Reception
      1. Interview Assignment
      2. Interview Appointment
    - iii. Interview
      1. Completion of Interview tabs shown below:

<b>General</b>	<b>Personal Property</b>	<b>Employment Details</b>	<b>Medical</b>	<b>Dental</b>	<b>Prints</b>	<b>DNA</b>	<b>Other Details</b>
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**Informant Details**

**Informant's ID**

No Image

ID Document Type: --Select One--

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Caller's Phone No

Salutation	Last Name	Suffix	First Name	Middle Name
--Select One--	last		first	

Sex	Race
--Select One--	--Select One--

Informant's Relationship To Decedent	Other Relationship	Date of Birth
Other	<input checked="" type="checkbox"/> Case Reporter	<input type="text"/>

Copy Decedent's Address.

2. Collection of Medical and Dental Records
3. Collection of Fingerprint possibilities
4. Documentation of Family Tree for DNA
5. Collection of DNA samples
  - a. Informant
  - b. Missing Person
- iv. Found Function
- v. Final Disposition
- vi. Batch data entry
  1. Closed manifest
  2. Prepared lists (e.g., company employees)
- d. Investigations-Uploading Photos and Documents
- e. Missing Person Detectives Support
  - i. Incident Statistics
  - ii. Sequence of Reported Missing->Confirmed Missing->Missing Person
  - iii. Support for consolidating similar reports (Clustering)
  - iv. Creating companion cases
  - v. Creating Task Lists
- f. Post Mortem Support
  - i. Recovery bag check-in
  - ii. Creation of Cases
  - iii. Triage
  - iv. Stations
    1. Exam
      - a. View
      - b. Autopsy

- 2. X-ray body
  - 3. X-ray dental
  - 4. DNA collection
  - 5. Evidence
    - a. Associated
    - b. Non-associated
  - 6. Photo
  - 7. Anthropology
    - v. Tracking (Daily Case List)
    - vi. Morgue
    - vii. Linking body parts cases
    - viii. Generating a DC
  - g. AM PM Matching
    - i. Setting up automated comparisons
    - ii. Comparing AM to PM
    - iii. Making an Identification
  - h. DVI Exit Reviews
    - i. Anthropology
    - ii. ID
    - iii. Review
  - i. Pre-canned Reports
3. Development, including Coders, Team Leads, QA Team, QA Lead and Designers. The estimates include allowance for iterative approach as necessary. The anticipated is based on our experience modifying the Disaster code with other states; few requirements have been collected at the time of estimating. The development will be highly iterative for modifications.
- Development will include:
- 1. Change all NJ reference with Tennessee References
  - 2. Update Reference tables with Tennessee data
  - 3. Configure system for Tennessee Response Plan
  - 4. Modify DNA process for Tennessee specifics
  - 5. Modify Exit Reviews to conform to Tennessee requirements
  - 6. Enable Caller ID for Call Center
  - 7. Enable Address Verification
- 4. Provide one 3-day visit UVIS CMS demonstration of developed functionality for stakeholders.
  - 5. Provide 3-days onsite training for five separate sessions (user roles)
  - 6. Modify/adapt Quick Reference Sheet Documentation
  - 7. Provide 5 days onsite Go Live Assistance, e.g., help with creating Notification Templates, Roles and User Accounts
  - 8. Support User Acceptance Testing-3 days onsite
  - 9. Provide System Documentation

10. Provide Source Code

11. Provide Project Management

- a. Prepare and update Project Calendar
- b. Create and update Issues Lists
- c. Organize response

12. Provide Support through duration of Project following Go Live

## **Phase 4 Services/Deliverables Breakdown with Key Milestones**

### **Subphase 1**

Payment 1: \$50,000

- a. Prepare Project Plan
- b. One three-day visit for data collection
- c. One two-day visit for follow-up data collection
- d. Remote Interviewing
- e. Preparation of Functional Specification for Modifications

*Milestone: Specification Sign Off by the State*

### **Subphase 2**

- a. Development and QA of Modifications for AM Functionality
- b. Monthly Reviews of Work In Progress via Go-To-Meetings
- c. Delivery of UVIS CMS AM Mass Fatality Disaster code
- d. Three days of onsite training for User Acceptance Testing users

*Milestone: Completion of Training for User Acceptance Testing of AM Functionality*

### **Subphase 3**

- a. Development and QA of Modifications for PM Functionality and AM-PM Matching
- b. Monthly Reviews of Work In Progress via Go-To-Meetings
- c. Delivery of UVIS CMS Mass Fatality Disaster code (AM, PM, AM-PM Matching)
- d. Three days of onsite training for User Acceptance Testing users

*Milestone:; Completion of Training for User Acceptance Testing for PM Functionality*

### **Subphase 4**

- a. One onsite, one-day overview for Leadership
- b. Delivery of Training
- c. Provide remote Go Live Set-Up Assistance
- d. Provide two consultants for two days onsite for Go Live support at one location
- e. Provide System Documentation
- f. Provide Source Code

*Milestone: Go Live*

## **Section 6**

### **Assumptions**

#### **Tennessee Environments**

ICRA Sapphire assumes Tennessee will provide web-based environments for:

- a. Production
- b. Development (Testing)
- c. Optionally, Training

Tennessee also will provide Load Balancing for at minimum the Production environment.

Remote access will be provided to Sapphire for trouble-shooting and solution implementation.

#### SERVER REQUIREMENTS (Minimum)

##### Database Server

- SQL Server 2008 R2 (Database Services, Full Text Search, Management Tools, Common components)

##### Web Server

- IIS 7.0 or above
- .NET Framework 4.0 (Full)
- Report Viewer Redistributable Package 2010

##### Application Server

- IIS 7.0 or above
- .NET Framework 4.0 (Full)

#### WORKSTATION REQUIREMENTS (Minimum)

All components required at the workstation are available at the workstation setup page, including

- IE 8.0 or IE 9.0
- Silverlight 5
- Flash Player to be installed (Version 11.8.800.94 or above)
- JavaScript should be enabled
- VintaSoft ActiveX for Scanning

#### **2. Web-Access for Users**

#### **3. Workstation/Notebook Set-Up for Users by Tennessee**

#### **4. Hardware Support by Tennessee**

## **Section 7**

### **Appendix: Sample Maintenance and Support Agreement**

**A1 The computer application identified as follows:**

**UVIS CMS**

**A2 Endorsements and Special Provisions**

#### Regular Operations

A2.1 Sapphire to provide “break and fix” support within regular business hours. Initial response to occur within six (6) hours of contact.

A2.2 Until otherwise designated by client, Sapphire will provide primary end user support via its Help Desk. Client will direct Sapphire in the response to trouble-reports, e.g.,

- a. Sapphire can respond to a trouble ticket with an e-mail to everyone on a distribution list to share knowledge
- b. Responses to trouble reports can be added to a central FAQ database (if one exists)
- c. Sapphire can provide monthly reports of trouble tickets, including a description of the problem and status, if client desires. If client wishes a monthly report, client must designate a person to receive the report.

Client will provide Sapphire will a list of departments, agencies and offices from where support may arise. Client may modify this list as necessary.

A2.3 Maintain UVIS CMS to industry standards with regard to the current foundation systems presently in use by client through incorporation of coding upgrades and adaptation of code to work with evolving underlying software (e.g., operating system, browser compatibilities, etc.)

- a. Maintenance releases will be provided only after passing Sapphire tests and standards
- b. Sapphire will support client User Acceptance Testing as needed. The criteria for acceptance will be:
  - a. 30 days from delivery of the upgrade or
  - b. The date on which all errors reported through the Sapphire Fault Reporting System during the 30 days following delivery of upgrade have been addressed by Sapphire or
  - c. When the upgrade passes agreed acceptance tests as defined by client (if test scripts have been provided)

A2.4 Sapphire will provide five (5) days of onsite support by two consultants (24 man-days) for Field and/or Table Top Exercises to be arranged by client. The 5-days could be used at any time in the coverage period, but do not extend past the period.

- A2.5 Sapphire will implement features of UVIS developed by other members of the UVIS community for client and change only for work need to integrate the functionality to the client version. Any modifications requested by client are not covered and work to execute those changes will be considered new development, estimated and performed on a time and materials basis within contract guidelines.
- A2.6 Client can modify UVIS CMS code. For Sapphire to fulfill the terms of this Support Agreement, client agrees to inform Sapphire of each change and provide technical documentation on a monthly basis. Fixes to issues caused by client modification are not covered by this Support Agreement, will be considered new development, estimated and performed on a time and materials basis within contract guidelines.
- A2.7 Sapphire will charge for overnight accommodations and food if necessary to fulfill the terms of this Support Agreement and if approved in advance by client.
- A2.8 All references to "Standard Rate" within this agreement relate to the standard hourly consultancy rates as defined in the supporting purchase order.
- A2.10 This agreement is valid for unlimited incidents logged by Sapphire per contract year.

#### Disaster Operations

- A2.11 In case of Activation, Sapphire will respond and make a best effort to reach the Client site within 24 hours. Sapphire will provide at least two consultants.
- A2.12 In an activation, the first 48 hours of service will be **without charge**, but overnight accommodations, if necessary, will be billable. Additional hours will be invoiced at Standard Rates.
- A2.13 Sapphire assumes client will provide credentials to allow its consultants to pass security points in order to provide service.
- A2.14 Sapphire assumes client will define where consultants are to report and to whom.

### **A3 Agreed Means of Access**

- A3.1 If a reported problem cannot be solved by telephone, Sapphire will provide the option of an on-line service, via modem and agreed communications software, to investigate and, if possible, solve the problem.
- A3.2 It should be noted that no remote changes to the "live" system will be actioned without the prior consent of the Client and acceptance (user) testing of any agreed changes will be the responsibility of the Client.

## **SPECIFICATION OF SERVICES AND CONDITIONS**

### **1. Services provided under the terms of Agreement**

- 1.1 Telephone support will be provided to Authorized Callers 24 hours per day, 365 per year.
- 1.2 Each separate incident will be logged by Sapphire and given an identifying number.

An individual incident may consist of several related calls and other follow-up action such as EMAILs or other communication, as agreed with the Client.

- 1.3 If a reported incident cannot be solved by telephone or any other mutually acceptable remote communication, Sapphire will provide, within forty-eight hours of a request, a Software Engineer at the Client's premises to investigate and, if possible, solve the problem.
- 1.4 Sapphire will at all times make their best endeavours to resolve incidents reported by clients by whatever method deemed appropriate and agreed with the client.

### **2. Scope of the Agreement**

- 2.1 Unless otherwise stated, this Agreement relates to UVIS CMS with the State of Tennessee.
- 2.2 The Agreement covers a period of 12 months from the date of commencement and shall be renewed automatically, for a further period of 12 months, on the first and each subsequent anniversary of commencement unless either party gives at least 90 days written notice of termination to the other party prior to the next anniversary date.
- 2.3 All changes to this Agreement must be agreed in writing by both parties.

### **3. Payment and Charges**

- 3.1 Sapphire will invoice the Client annually in advance and, reserves the right to withhold services as defined within this Agreement until payment has been received in full.
- 3.2 Charges will be reviewed annually and will apply from the anniversary date. Sapphire will give the Client at least 30 days written notice of any increase in rates.

### **4. The Client's Responsibilities**

- 4.1 The Client is responsible for maintaining the hardware and operating system software, audit controls, the accuracy and security of input and output data, restart and recovery routines, security routines for programs and data and all other procedures necessary for the Clients intended use of the product. Sapphire reserves the right to charge the Client, for any reasonable costs it incurs in

providing its services under Clause 1 when the Client has not fulfilled its responsibilities under this Clause 4.1 and has requested such services.

## **5. Faults caused other than by the product covered**

- 5.1 This Agreement does not include the correction of problems caused by misuse of the product, nor those caused by hardware faults, or software other than that detailed in schedule A. If a problem is shown to be caused by misuse, or by hardware or software not included in this Agreement, Sapphire reserves the right to charge the Client for any costs incurred in investigating the problem.

## **6. Confidentiality**

- 6.1 Sapphire undertakes not to disclose to any third party, without the prior consent of the Client, any information of a private or confidential nature relating to the business of the Client which becomes available to the company during the performance of this Agreement.

## **7. General Provisions**

- 7.1 Neither party shall be liable or deemed to be in default for any delay to perform any obligation under this Agreement if such delay results directly or indirectly from any cause beyond the control of either party including, but not limited to, acts of public enemy, war, riots, civil disturbances, insurrections, accidents, fire, explosions, earthquakes, floods, the elements, labour dispute, shortages of suitable materials, labour or transportation.
- 7.2 Neither this Agreement or any rights hereunder may be assigned by either party without the prior written consent of the other party, provided that the Client shall be entitled to assign the benefit of the Agreement to any associated company. For this purpose "associated company" shall mean any holding company or subsidiary of the Client, or any subsidiary of the Client's holding company.
- 7.3 The validity, construction and performance of this Agreement shall be governed by Law of the State of Tennessee.

## **8 Non-Solicitation**

- 8.1 The Client or its associates or subsidiaries will not without prior written consent from Sapphire offer work in any form or enter into any negotiation or contractual arrangement with any worker introduced or supplied by Sapphire for a period of two years after the end of the contract under which such worker had been supplied.

## **9 Liability/Consequential Loss**

- 9.1 Except as herein expressly stated Sapphire shall not be liable for any loss or damage arising from stoppage, breakdown or failure of goods or services supplied to the Client. However, Sapphire shall be liable to the Client for any loss or damage arising from any breach of its undertakings in the agreement or from negligence or wilful default or fraud provided that such liability shall not extend to any loss, damage, expense or claim which is not reasonably foreseeable, including loss of profit or opportunity. The maximum liability of Sapphire to the Client under this agreement and for in relation to the services to be provided under this agreement (apart from liability for death or

permanent injury due to negligence) shall be limited to \$ 1,000,000 in respect of any claim or series of claims arising out of any one incident. Sapphire confirms that it has taken out Professional Indemnity and Fidelity Insurance covering negligence, contractual breach and any act of fraud or dishonesty of it or its employees.