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[www.admin.ks.gov/offices/procurement-and-contracts](http://www.admin.ks.gov/offices/procurement-and-contracts)

Laura Kelly, Governor

The above referenced contract award was recently posted to Procurement and Contracts website. The document can be downloaded by going to the following website: <http://www.da.ks.gov/purch/Contracts/>

The parties shall bring any and all legal proceedings arising hereunder in the State of Kansas District Court of Shawnee County, unless otherwise specified and agreed upon by the State of Kansas. Contractor waives personal service of process, all defenses of lack of personal jurisdiction and forum non conveniens. The Eleventh Amendment of the United States Constitution is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this Agreement shall be deemed a waiver of the Eleventh Amendment

The provisions found in Contractual Provisions Attachment (DA 146a) are incorporated by reference and made a part of this contract.

The Director of Purchases may terminate this contract, or any part of this contract, for cause under any one of the following circumstances if the Contractor fails to remedy the conditions within thirty (30) days from the receipt of the notice of breach from the State:

- the Contractor fails to make delivery of goods or services as specified in this contract;
- the Contractor provides substandard quality or workmanship;
- the Contractor fails to perform any of the provisions of this contract, or
- the Contractor fails to make progress as to endanger performance of this contract in accordance with its terms.

The Director of Purchases shall provide Contractor with written notice of the conditions endangering performance. If the Contractor fails to remedy the conditions within thirty day (30) days from the receipt of the notice (or such longer period as State may authorize in writing), the Director of Purchases shall issue the Contractor an order to stop work immediately. Receipt of the notice shall be presumed to have occurred within three (3) days of the date of the notice.

The Director of Purchases may terminate performance of work under this contract in whole or in part whenever, for any reason, the Director of Purchases shall determine that the termination is in the best interest of the State of Kansas. In the event that the Director of Purchases elects to terminate this contract pursuant to this provision, it shall provide the Contractor written notice at least 30 days prior to the termination date. The termination shall be effective as of the date specified in the notice. The Contractor shall continue to perform any part of the work that may have not been terminated by the notice.

If this contract is terminated, the State, in addition to any other rights provided for in this contract, may require the Contractor to transfer title and deliver to the State in the manner and to the extent directed, any completed materials. The State shall be obligated only for those services and materials rendered and accepted prior to the date of termination.

In the event of termination, the Contractor shall receive payment prorated for that portion of the contract period services were provided to or goods were accepted by State, any work in progress completed up to the effective date of termination and termination fees, if any, agreed in the contract.

The rights and remedies of the State provided for in this contract shall not be exclusive and are in addition to any other rights and remedies provided by law.

If the Contractor elects not to proceed with performance under any such contract with the State, the Contractor assigns to the State all rights to and interests in any cause of action it has or may acquire under the anti-trust laws of the United States and the State of Kansas relating to the particular products or services purchased or acquired by the State pursuant to this contract.

The Contractor shall indemnify the State against any and all loss or damage to the extent arising out of the any third party claims arising from Contractor's negligence in the performance of services under this contract and for infringement of any copyright or patent occurring in connection with or in any way incidental to or arising out of the service, operations or performance of work by Contractor under this contract (excluding any claims arising from any misuse or modification by State or any claims arising from compliance with State's instruction or from materials provided by the State). Contractor shall be provided notice of claim and shall have control of defense.

The State shall not be precluded from receiving the benefits of any insurance the Contractor may carry which provides for indemnification for any loss or damage to property in the Contractor's custody and



The Contractor accepts full responsibility for payment of unemployment insurance, workers compensation, social security, income tax deductions and any other taxes or payroll deductions required by law for its employees engaged in work authorized by this contract.

The Contractor and all lower tiered subcontractors under the Contractor shall properly classify workers as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance coverage, unemployment taxes, social security taxes, and income tax withholding. Failure to do so may result in contract termination.

All contractors are expected to comply with the Immigration and Reform Control Act of 1986 (IRCA), as may be amended from time to time. This Act, with certain limitations, requires the verification of the employment status of all individuals who were hired on or after November 6, 1986, by the Contractor as well as any subcontractor or sub-contractors. The usual method of verification is through the Employment Verification (I-9) Form.

The Contractor hereby certifies without exception that such Contractor has complied with all federal and state laws relating to immigration and reform. Any misrepresentation in this regard or any employment of persons not authorized to work in the United States constitutes a material breach and, at the State's option, may subject the contract to termination for cause and any applicable damages.

Unless provided otherwise herein, all contractors are expected to be able to produce for the State any documentation or other such evidence to verify Contractor's IRCA compliance with any provision, duty, certification or like item under the contract.

Upon request, the Contractor shall present a certificate of Worker's Compensation, Public Liability, and Property Damage Insurance to Procurement and Contracts.

The Contractor shall not knowingly employ, during the period of this contract or any extensions to it, any professional personnel who are also in the employ of the State and providing services involving this contract or services similar in nature to the scope of this contract to the State. Furthermore, the Contractor shall not knowingly employ, during the period of this contract or any extensions to it, any state employee who has participated in the making of this contract until at least two years after his/her termination of employment with the State.

The Contractor agrees to abide by all federal, state and local laws, and rules and regulations prohibiting discrimination in employment and controlling workplace safety. Any violations of applicable laws or rules or regulations may result in termination of this contract.

The Contractor may have access to private or confidential data maintained by State to the extent necessary to carry out its responsibilities under this contract. Contractor must comply with all the requirements of the Kansas Open Records Act (K.S.A. 45-215 et seq.) in providing services under this contract. Contractor shall accept full responsibility for providing adequate supervision and training to its agents and employees to ensure compliance with the Act. No private or confidential data collected, maintained or used in the course of performance of this contract shall be disseminated by either party except as authorized by statute, either during the period of the contract or thereafter. Contractor agrees to return any or all data furnished by the State promptly at the request of State in whatever form it is maintained by Contractor. On the termination or expiration of this contract, Contractor shall not use any of such data or any material derived from the data for any purpose and, where so instructed by State, shall destroy or render it unreadable.

Neither party's confidentiality obligations will apply to information that is in public domain, information received from third party, information that is independently developed by the receiving party and information required to be disclosed by applicable law.

### 1.30. Environmental Protection

The Contractor shall abide by all federal, state and local laws, and rules and regulations regarding the protection of the environment. The Contractor shall report any violations to the applicable governmental agency. A violation of applicable laws or rule or regulations may result in termination of this contract for cause.

### 1.31. Care of State Property

The Contractor shall be responsible for the proper care and custody of any state owned personal tangible property and real property furnished for Contractor's use in connection with the performance of this contract. The Contractor shall reimburse the State for such property's loss or damage caused by the Contractor, except for normal wear and tear.

### **1.32. Prohibition of Gratuities**

Neither the Contractor nor any person, firm or corporation employed by the Contractor in the performance of this contract shall offer or give any gift, money or anything of value or any promise for future reward or compensation to any State employee at any time.

### 1.33. Retention of Records

Unless the State specifies in writing a different period of time, the Contractor agrees to preserve and make available at reasonable times all of its books, documents, papers, records and other evidence involving transactions related to this contract for a period of five (5) years from the date of the expiration or termination of this contract.

Matters involving litigation shall be kept for one (1) year following the termination of litigation, including all appeals, if the litigation exceeds five (5) years.

The Contractor agrees that authorized federal and state representatives, including but not limited to, personnel of the using agency; independent auditors acting on behalf of state and/or federal agencies shall have access to and the right to examine records during the contract period and during the five (5) year post contract period. Delivery of and access to the records shall be within five (5) business days at no cost to the state.

### 1.34. Off-Shore Sourcing

If, during the term of the contract, the Contractor or subcontractor plans to move work previously performed in the United States to a location outside of the United States, the Contractor shall immediately notify the Procurement and Contracts and the respective agency in writing, indicating the desired new location, the nature of the work to be moved and the percentage of work that would be relocated. The Director of Purchases, with the advice of the respective agency, must approve any changes prior to work being relocated. Failure to obtain the Director's approval may be grounds to terminate the contract for cause.

### **1.35. Indefinite Quantity Contract**

This is an open-ended contract between the Contractor and the State to furnish an undetermined quantity of a good or service in a given period of time. The quantities ordered will be those actually required during the contract period, and the Contractor will deliver only such quantities as may be ordered. No guarantee of volume is made. An estimated quantity based on past history or other means may be used as a guide.

### 1.36. Prices

Prices shall remain firm for the entire contract period and subsequent renewals. Prices shall be net delivered, including all trade, quantity and cash discounts. Any price reductions available during the contract period shall be offered to the State of Kansas. Failure to provide available price reductions may result in termination of the contract for cause.

Payment Terms are Net 30 days. Payment date and receipt of order date shall be based upon K.S.A. 75-6403(b). This Statute requires state agencies to pay the full amount due for goods or services on or before the 30th calendar day after the date the agency receives such goods or services or the bill for the goods and services, whichever is later, unless other provisions for payment are agreed to in writing by the Contractor and the state agency. NOTE: If the 30th calendar day noted above falls on a Saturday, Sunday, or legal holiday, the following workday will become the required payment date.

Payment schedule shall be on a frequency mutually agreed upon by both the agency and the Contractor.

If, during the course of this contract the Contractor is found to owe a debt to the State of Kansas, a state agency, municipality, or the federal government, agency payments to the Contractor may be intercepted / setoff by the State of Kansas. Notice of the setoff action will be provided to the Contractor. Pursuant to K.S.A. 75-6201 et seq, Contractor shall have the opportunity to challenge the validity of the debt. The Contractor shall credit the account of the agency making the payment in an amount equal to the funds intercepted.

Unless otherwise specified, the contracted price shall exclude all applicable federal, state and local taxes. The Contractor shall pay all taxes lawfully imposed on it with respect to any product or service delivered in accordance with this Contract. The State of Kansas is exempt from state sales or use taxes and federal excise taxes for direct purchases. These taxes shall not be included in the contracted price. Upon request, the State shall provide to the Contractor a certificate of tax exemption. This Section will override Section 4.10 of the DA-146a.

Any Contractor who defaults on delivery or does not perform in a satisfactory manner as defined in this Agreement may be barred for up to a period of three (3) years, pursuant to K.S.A. 75-37,103, or have its work evaluated for pre-qualification purposes. Contractor shall disclose any conviction or judgment for a criminal or civil offense of any employee, individual or entity which controls a company or organization or will perform work under this Agreement that indicates a lack of business integrity or business honesty. This includes (1) conviction of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract or in the performance of such contract or subcontract; (2) conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property; (3) conviction under state or federal antitrust statutes; and (4) any other offense to be so serious and compelling as to affect responsibility as a state contractor. For the purpose of this section, an individual or entity shall be presumed to have control of a company or organization if the individual or entity directly or indirectly, or acting in concert with one or more individuals or entities, owns or controls 25 percent or more of its equity, or otherwise controls its management or policies. Failure to disclose an offense may result in the termination of the contract.

The Contractor shall perform all work and furnish all supplies and materials, machinery, equipment, facilities, and means, necessary to complete all the work required by this Contract, within the time specified, in accordance with the provisions as specified.

The Contractor shall be responsible for all work put in under these specifications and shall make good, repair and/or replace, at the Contractor's own expense, as may be necessary, any defective work, material, etc., if the said issue is due to failure to meet the agreed specifications and acceptance criteria set forth in the scope of work and any approved change orders.

If not otherwise provided, materials or work called for in this contract shall be furnished and performed in accordance with best established practice and standards recognized by the contracted industry and comply with all codes and regulations which shall apply.

All products and services necessary to provide the functional capabilities described by the specifications, shall be included.

The State reserves the right to reject, on arrival at destination, any items which do not conform with specification of the Contract.

No contract provision or use of items by the State shall constitute acceptance or relieve the Contractor of liability in respect to any expressed warranties.

Except as set forth in the contract and approved change orders, Contractor makes no warranties to state, express or implied, with respect to any services or deliverables, including, without limitation, any implied warranties of merchantability or fitness for a particular purpose. All such other warranties are hereby disclaimed. Section 4.8 of DA-146a is hereby revised to exclude warranties of merchantability and fitness for a purpose.

Any and all information/data required to be provided at any time during the contract term shall be made available in a format as requested and/or approved by the State.

The Bid document, together with the specifications set forth shall become a part of the contract between the Contractor and the State of Kansas.

In the event of contract termination or expiration, Contractor shall provide all reasonable and necessary assistance to State to allow for a functional transition to another vendor.

This contract, in its final composite form, shall represent the entire agreement between the parties and shall supersede all prior negotiations, representations or agreements, either written or oral, between the parties relating to the subject matter hereof. This Agreement between the parties shall be independent of and have no effect on any other contracts of either party.



This contract shall be modified only by the written agreement and approval of the parties. No alteration or variation of the terms and conditions of the contract shall be valid unless made in writing and signed by the parties. Every amendment shall specify the date on which its provisions shall be effective.

If any provision of this contract is determined by a court of competent jurisdiction to be invalid or unenforceable to any extent, the remainder of this contract shall not be affected and each provision of this contract shall be enforced to the fullest extent permitted by law.

If the Contractor fails to deliver the product within the delivery time established by the contract, the State reserves the right to make a claim against Contractor for breach (subject to the terms of Section 1.10) and Contractor shall be liable for any costs incurred by the State to fix any defects or issues .

“Work Product” shall mean all data, forms, procedures, software, manuals, system descriptions and workflows developed by the Contractor for the State under this contract. All Work Product shall be owned by the using agency. The Contractor may not release any Work Product without the written approval of the using agency. Notwithstanding the foregoing, Contractor shall have the right to use, without consent or approval of the State, such Work Product for similar implementations for any other states in the United States without any remuneration or royalties to the State. If Contractor further modifies such Work Product, then such modified product will be owned by the Contractor. If any commercially licensed products of Contractor are used in the performance of services, then the parties will enter into a separate license agreement for it.

Ownership of all pre-existing intellectual property and any derivatives of said intellectual property of Contractor and Contractor's licensors shall remain with Contractor.

Pursuant to IRS requirements all computer and network equipment provided by the State and used in the performance of this contract will be considered property of the State during the contract term.

System Acceptance is the period of time for KDOL to approve the system's operation in a full production environment. System Acceptance will be achieved when the following conditions have been met:

- All awarded Deliverables have been accepted and signed off by the KDOL IT Contract Manager.
- All production releases have been completed, and the system has been fully implemented (i.e., for all users) for a minimum of thirty (30) business days.
- The system is running in accordance with the approved detailed design documentation, and all of the following conditions are met:

- No Severity 1 defects exist;

**Level 1 Critical:** Any Error, Deficiency, or issue causing the Application Services, System(s), or related Deliverables (or any portion thereof) to be un-Available in a manner that affects a vast majority of State Users or Users.

- No more than ten (10) Severity 2 defects exist;

**Level 2 Major:** Any Error, Deficiency, or issue causing the Application Services, System(s), or related Deliverables (or any portion thereof) to be un-Available in a manner that affects a substantial number of State Users or Users.

- All remaining unresolved Severity 3 and 4 defects are prioritized.

**Level 3 Important:** Any Error, Deficiency, or issue causing the Application Services, System(s), or related Deliverables (or any portion thereof) to be un-Available in a manner that affects a material number of State Users or Users. For example, when a minor defect is reported.

- Level 4 Minor:** A minor Error, Deficiency, or issue not covered in levels 1–3 above.
- KDOL will document System Acceptance in writing.
  - Incremental production releases of component deliverables prior to the final production

release will not require a System Acceptance period, but the Awarded Vendor must provide production support.

- “Train the Trainer as part of vendor scope” s complete.

**1.56. Software Escrow Agreement.**

The software escrow terms of the RFP will not apply.

- A. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOSS OF PROFIT), EXEMPLARY OR PUNITIVE DAMAGES WHETHER IN CONTRACT, TORT OR OTHER THEORIES OF LAW, EVEN IF SUCH OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING CONTRACTOR SHALL BE LIABLE FOR DIRECT DAMAGES INCLUDING COSTS OF REPLACEMENT SYSTEMS OR SERVICES AND COSTS OF SERVICES TO FIX ANY DEFECTS CAUSED BY CONTRACTOR.
- B. Contractor's aggregate liability for any claims that arise during the implementation of the project and for liability for any claims that arise after the implementation project including Contractor's liability for any data breach or security breach which causes the release of Personally identifiable information (PII), will be limited to a cap of Twenty-Six Million (\$26,000,000) USD through December 31, 2025, and then contractor's liability for the period of 1/1/2026 through 12/31/2028 will be limited to a cap of the greater of Fifteen Million (\$15,000,000) USD or fees paid during the twenty-four (24) months preceding the event giving rise to the liability. For clarity, the maximum liability of the Contractor during the entire initial contract term shall not exceed Twenty-Six Million (\$26,000,000).
- C. Should the agreement be renewed, the Liability Cap beginning 1/1/2029 would be limited to fees paid during the twelve (12) months preceding the event giving rise to the liability
- D. Neither Party shall be liable for any delay or failure in the performance of its obligations under this Agreement or any Statement of Work (SOW) hereunder, if and to the extent such delay or failure is caused by the actions or omissions of the other Party or other Party's agents or due to a breach of this Agreement or a SOW by the other Party.

**2. Statement of work – The statement of work is attached hereto as Exhibit A.**

The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44 1001, et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111, et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101, et seq.) (ADA), and Kansas Executive Order No. 19-02, and to not discriminate against any person because of race, color, gender, sexual orientation, gender identity or expression, religion, national origin, ancestry, age, military or veteran status, disability status, marital or family status, genetic information, or political affiliation that is unrelated to the person's ability to reasonably perform the duties of a particular job or position; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) Contractor agrees to comply with all applicable state and federal anti-discrimination laws and regulations; (g) Contractor agrees all hiring must be on the basis of individual merit and qualifications, and discrimination or harassment of persons for the reasons

stated above is prohibited; and (h) if it is determined that the contractor has violated the provisions of any portion of this paragraph, such violation shall constitute a breach of contract and the contract may be canceled, terminated, or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

### 3.7. Acceptance of Contract

This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.

### **3.8. Arbitration, Damages, Warranties**

Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

### **3.9. Representative's Authority to Contract**

By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.

### **3.10. Responsibility For Taxes**

The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.

### 3.11. Insurance

The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101, et seq.), the contractor shall bear the risk of any loss or damage to any property in which the contractor holds title.

### 3.12. Information

No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101, et seq.

### 3.13. The Eleventh Amendment

"The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."

### **3.14. Campaign Contributions / Lobbying**

Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.

Subject to the terms and conditions of the bid specifications and this contract, State hereby accepts the offer of Contractor as expressed by Contractor's bid submitted to Procurement and Contracts on May 27, 2021 in response to Bid Event Number EVT007951.

It is understood and agreed by the parties that pursuant to the bid, Contractor agrees to furnish Unemployment Insurance System for Kansas Department of Labor on order of the Agency at the price or prices contained herein.

This contract is entered into this 1st day of April, 2022 by and between the State of Kansas (State) and Tata Consultancy Services Limited, New York, NY (Contractor).

**Exhibit A**  
**Statement of Work**



**Building on belief**

**Kansas Department of Labor**  
**Unemployment Insurance Modernization**

**Statement of Work**  
**Final**  
*March 25, 2022*





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## List of Abbreviations

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**Table 1: Abbreviations**

| Terms | Meaning                                   |
|-------|---|
| ADA   | Americans with Disabilities Act           |
| AWS   | Amazon Web Services                       |
| BAM   | Benefits Accuracy Measurement             |
| BI    | Business Intelligence                     |
| BIRT  | Business Intelligence and Reporting Tools |

| Terms   | Meaning  |
|---------|--|
| BTQ     | Benefits Timelines Quality                             |
| CR      | Change Request   |
| CSR     | Corporate Social Responsibility                        |
| CST     | Central Standard Time                                  |
| CWC     | Combined Wage Claim                                    |
| DM      | Data Migration   |
| DMS     | Document Management System                             |
| DMV     | Department of Motor Vehicles                           |
| DOL     | Department of Labor                                    |
| DR      | Disaster Recovery                                      |
| ETVX    | Entry, Task, Validation and Exit criteria              |
| FAQ     | Frequently Asked Questions                             |
| FedRAMP | Federal Risk and Authorization Management Program      |
| ICON    | Interstate Connectivity                                |
| IDE     | Integrated Development Environment                     |
| IM      | Instant Messaging                                      |
| IPS     | Intrusion Prevention System                            |
| IRORA   | Interstate Reciprocal Overpayment Recovery Arrangement |
| ISO     | Information Systems Office                             |
| IT      | Information Technology                                 |
| ITEC    | Information Technology Executive Council               |
| IVR     | Interactive Voice Response                             |
| JAWS    | Job Access with Speech                                 |
| JDK     | Java Development Kit                                   |
| KDOL    | Kansas Department of Labor                             |
| KS      | Kansas   |
| LDAP    | Lightweight Directory Access Protocol                  |
| MS      | Microsoft  |
| NASWA   | National Association of State Workforce Agencies       |
| NTP     | Network Time Protocol                                  |
| OCM     | Organizational Change Management                       |
| OH      | Ohio   |
| OS      | Operation System                                       |
| PIN     | Personal Identification Number                         |
| PTP     | Point To Point   |
| RPA     | Robotic Process Automation                             |
| RPN     | Risk Priority Numbers                                  |
| RPO     | Recovery Point Objective                               |
| RTO     | Recovery Time Objective                                |
| SAVE    | Systematic Alien Verification for Entitlements         |
| SDLC    | Software Development Lifecycle                         |
| SIEM    | Security Information and Event Management              |

| Terms | Meaning  |
|-------|--|
| SIT   | System Integration Testing                       |
| SMS   | Short Message Service                            |
| SOAP  | Simple Objects Access Protocol                   |
| SOP   | Standard Operating Procedure                     |
| SOW   | Statement of Work                                |
| SQL   | Structured Query Language                        |
| SSA   | Social Security Administration                   |
| SSH   | Secure Shell Protocol                            |
| SSN   | Security Social Number                           |
| TCS   | Tata Consultancy Services Limited                |
| TOP   | Treasury offset program                          |
| UAT   | User Acceptance Testing                          |
| UCFE  | Unemployment Compensation for Federal Employers  |
| UCX   | Unemployment Compensation for Ex-Service Members |
| UI    | Unemployment Insurance                           |
| URL   | Uniform Resource Locator                         |
| USD   | United States Dollar                             |
| USDOL | United States Department of Labor                |
| VPN   | Virtual Private Network                          |
| WBT   | Web based Training                               |
| XML   | Extensible Markup Language                       |

## Document Revision List

| Version Number | Version Date | Revision Description   | Author |
|----------------|--------------|--|--------|
| 1.0            | 03/01/2022   | Initial Version - Draft  | TCS    |
| 2.0            | 03/10/2022   | Revised version including KDOL, NASWA Comments, Payment Milestones | TCS    |
| 3.0            | 03/18/2022   | Accept changes, additional comments                                | TCS    |
| 4.0            | 03/25/2022   | Final document with all additional comments incorporated           | TCS    |
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### 1 Introduction

This Kansas Department of Labor (KDOL) Unemployment Insurance Modernization Statement of Work (SOW) defines the scope of work to be performed under the KDOL Unemployment Insurance Modernization Contract between the State of Kansas, Department of Labor (Agency) and Tata Consultancy Services, Ltd (TCS). As part of this SOW, TCS will implement KDOL RFP functional and non-functional requirements, manifested in a signed off and agreed to set of requirements that will be the result of the Gap Analysis phase of the project.

TCS will be using the **ReEmployUSA Consortium solution**, specifically the State of Mississippi version, as the base solution for the modernization of KDOL Unemployment Insurance system including Benefits, Appeals and Tax functions. KDOL will obtain the base solution from the State of Mississippi and TCS will facilitate. The base solution will include all current production application components artifacts and documentation, including the current claimant journey Initiative.

Throughout the duration of the contract, the Kansas UI TCS team will continually assess if there are modules or functionality that can be leveraged from additional TCS states to help accelerate the configuration and development of the Kansas UI solution. As opportunities present themselves, TCS will assess the impact of implementing these functionalities and will coordinate with these other state programs accordingly.

## 2 High Level Project Scope

This section details the high-level scope for KDOL Unemployment Insurance modernization program. The detailed statement of work contained within this document describes the implementation of the new KDOL Unemployment Insurance system. TCS will lead KDOL through a series of system walkthroughs to validate and finalize requirements, which will ultimately manifest itself through the development and configuration of a new system.

### 2.1 Solution Overview

TCS proposes to use the Unemployment Insurance (UI) solution from Mississippi as the base solution for KDOL UI Modernization. KDOL will need to request Mississippi to get access to the transfer solution including source code, database, documentation, and all other project artifacts. The following section lists the key functions in benefits, tax and appeals services that are available in the proposed TCS UI solution:

#### 2.1.1 Benefits Functions

- **Claims Intake** – The system captures an initial and additional or reopened claim application, performs real time SSA check, and determines UI eligibility. The claims intake flow has integrated interfaces, such as SSA, SAVE, ICON, DMV, and addresses real-time validation checks and establishes valid claims without processing delays. The process is also integrated with a configurable questionnaire engine that gathers specific information for non-monetary issues detected during the claim filing process. The integrated tax application enables real-time employment and wage verification and calculates the estimated benefit rate and potential issue details at the end of the filing process. Integrating with the State's employment system for automatic UI registration and re-employment services, the system automatically establishes new benefits year (NBY) claims based on eligibility. Mass layoff claims and notification functions in the system allow processing of these claims in bulk and apply the same rules and decisions for all claimants. The system determines and adjusts the base period automatically for the claimants who received worker's compensation in the base period quarter.
- **Monetary Determination** – The system determines monetary eligibility by using wages available in the integrated tax system. Monetary issues are created to determine the claimant's wages in case of a mismatch with the tax system. Military and federal employment is verified through UCFE and UCX interfaces and, based on the information received, a claim is established. An interface with ICON for out of state employer wages and determination of eligibility is also included.
- **Non-Monetary Determination** - Non-monetary issues are detected during claim filing, weekly claim filing, and audit processes. Non-monetary investigation can be initiated by agency staff manually. A configurable questionnaire engine allows changes to fact-finding questions without any code changes. The rule-based configuration allows the system to auto-adjudicate non-monetary issues. It is supported by auto-scheduling of fact finding. The fact-finding process captures claimant and/or employer statements and staff can also view original responses from the issue detection process. Configurable, predefined adjudication decision letter templates are included for each type of decision. Non-monetary issue decisions can be reconsidered by staff, and the system automatically takes care of the future impact on payment and chargeability.
- **Weekly Certification** – Weekly certification flow is integrated with work searches and triggers reemployment service's related integration post filing process. The system presents an appropriate questionnaire and captures information based on the active program type. The system supports standard IVR integration, like filing weekly certification, payment inquiry, and changing a claimant's personal identification number (PIN). It can be further customized as per the State's IVR system requirements. A claimant can file the past one or two weeks based on configurable weekly certification cycle. Agency staff has special privileges to file back weeks on behalf of claimants.
- **Benefits Payments** - The offline processing of the payment is performed through batches that include processing weekly certifications for payments, identifying correct program type for payment and paying benefits to claimant's preferred payment method – direct deposit or debit card. Business rules to determine a valid claim, eligibility for

benefits payment, stopping issues, payment amount, tax withholding, and deductions (pensions, bonus pay, child support, holiday pay, etc.) are implemented in the batch programs. Role-based configurations allow the CSR to issue manual payment for specific cases. Detailed drill-down inquiry screens provide weekly claim processing status, payment, deduction, and withholding. Staff can cancel a returned payment from a bank and can reissue as required. The system has implemented standard payment interfaces with bank and child support agency.

- **Appeals** – The appeals process is integrated with benefits and tax functions and supports different types of appeals like non-monetary, tax intercept, tax appeal, late appeal etc. Appeals can be filed by claimants and employers. Appeal case details are maintained under a unique docket number. Appeal is conducted at higher and lower level. External Court Appeal details are maintained in the system with data on filing status and decisions being entered for a particular docket. Appeals processes include filing an appeal, handling appeal parties, scheduling automated hearings, withdrawals, case hearings, decision rendering, proofreading, mailing the decisions etc. The system provides integration with the State's hearing system. Reports for appeals timeliness and backlog are available in the system.
- **Overpayments and Collections** - Multiple crossmatches (e.g., national new-hire crossmatch, national wage crossmatch, state new hire crossmatch, incarceration crossmatch and Appriss crossmatch) are available in the system to detect the potential overpayment automatically. Overpayment investigation processes are defined to collect information from the employer and claimant, adjudicate the overpayment decision, and establish the overpayment. Collection processes are implemented in the system to recover the overpayment amount from the claimant to offset future benefits, including IRORA offset, Treasury Offset Program (TOP), State income tax intercepts, wage garnishment, liens, and warrants. Claimants have the option to repay via check, debit card, credit card, or bank account. The system has processes in place to generate payment agreements and track the collections against the agreement. Based on the business rules configured, the overpayment write off is processed. The system issues a refund for excessive collection amount after the required offset is applied per business rules. A collection process hold can be added by a pending appeals process or manually by staff.
- **Benefits Maintenance** - Allows claimants and agency users to maintain claimant related details including address, name, payment mode, communication preference, payment options, tax withholding options and language preference. The system supports backdating claims, which automatically determines a new effective date for the claim, as well as re-process all related weeks. The system automatically cancels a waiting period week if the claim effective date has changed and will issue the payment as applicable. This process determines if there is a change in the base period, if adjustments are needed for earlier paid weeks, and if a claim is a combined wage claim. The system allows ID theft claimant transfer to pseudo-claimant and automatically transfer related claim, weeks and payment, overpayment information is performed.
- **Federal Reporting** – The system has an integrated component to generate reports to the USDOL on a weekly, monthly, and quarterly basis as required. The system generates the required federal reports and prepares an extract file to create an audit trail. This extract file is loaded into the SUN-based data validation software.
- **Benefits Charges** – The system automatically determines the benefit charges for employers who are identified as liable employers for benefits paid to the claimant. The charges are also automatically redetermined in case any changes in the claims are needed, such as establishment and collection of overpayments and changes in the prorate ratio of base period wages of different employers. The system will non-charge an employer automatically as per business rules. Automated CWC IB6 billing, federal, and military billing interfaces are built in for efficient and error-free billing.
- **Audit, BAM, BTQ** – The system can establish and maintain internal controls that deter and detect fraud and secure confidential data. This includes assuring address changes for the claimant and employer are correct. The system generates an internal audit address change listing report, a report of agency employees who have overpayments pending with the Agency and a report of all agency employees who have a business in the state. The system provides functionality to perform audits for Benefits Accuracy Measurement (BAM) and Benefits Timelines Quality (BTQ) cases. It allows users to process random numbers, generate samples and assign and maintain audit cases, conduct audits, and record results. The system generates data files and uploads to DOL SUN system.



- **Inquiry** – Claimants and staff can access detailed drill down inquiry screens to get comprehensive claim information, claimant's account information, weekly certification processing status and payment information through claim cycle. All correspondence issued to claimants can be searched and accessed through the common inquiry screens. Role-based implementation provides access of sensitive information to specific staff members only.

### 2.1.2 Tax Functions

- **Employer Registration** – The system allows the employer to register online using self-service mode or by calling staff. The system captures and validates registration data including but not limited to – liability begin date, contact information (physical address, unemployment claims address, payroll address contact person's address), country code, county, county FIPS code, phone numbers (UI, claims, and tax purposes), officer or ownership information (i.e. entity/ownership type, partner/general partner name(s), officers and titles), trade name(s)/DBA(s), points of contact, email addresses, liability information, employment details, wages provided, acquisition information and prior registration information.

The system determines the liability of an employer based on defined business rules. An approved registration work item is created if system cannot determine liability real-time and is assigned to staff to work on it. Once an employer is registered, liability and rate notices are sent to the employer based on communication preferences (USPS or email) selected by employer. The system notifies the employer of resolution in writing after an investigation is complete and employer is determined as Liable or Non-Liable.

- **Account Maintenance** – The system allows users to perform account maintenance of employer's address and contacts. Staff can maintain business ownership details, employer rate, field representative, county linked to employer, add/ remove third party linked to employer account, requests to close an employer account, verify good standing of an employer account, maintain Federal Employer Identification Number (FEIN), and cancel employer accounts.
- **Tax and Wage Report Filing** – The system allows employer/ TPA/ staff on behalf of the employer to file tax and wage reports for quarter/year. Also, an employer/ TPA/ staff can perform adjustment of filed tax and wage reports. A staff user can enter data into the wage reports that are received from the employer. System allows employer to provide supplemental reports in addition to already filed reports. The system also allows the modification (update or delete) of wage reports. It allows staff to transfer wage reports between employer accounts for a quarter/year. The system provides a full audit trail of all transactions posted by employer/TPA for tax and wage reports, which are available to staff members using inquiry screens.
- **Tax Payments** – The system allows an employer or a Third-Party Administrator (TPA) to make an online payment for the quarterly dues on an employer account. A CSR can upload bulk tax reports and payments file received from a TPA or employer. Staff can perform payment transfers between different employer accounts and credit transfers within the same account. Staff can use the application to cancel a payment from an employer(rated) when the payment is rejected by the bank. An employer user can maintain their bank accounts information, which is used for payments, online in the application. They can add/ update the account details (checking/ saving accounts). The system provides a full audit trail of all transactions posted by the employer/TPA for payments, which are available to staff using inquiry screens.
- **Employer Transfer** – The system allows staff to enter total and partial transfer (acquisition) information into the system that is received from the employer. Staff members can reverse transfers that are entered in error into the system. The system sends a notice of transfer to the successor employer.
- **Employer Tax Rate** – The system uses the eligibility of employers, processes the wages, charges, acquisition details, and determines employer annual tax rate based on the state's business rules. The system automatically generates notice of tax rate to employer once annual rate is calculated. An employer can appeal the rate provided by the agency. The system will process voluntary contributions received from employer for lowering their tax rate. The system sends information about the rate of employers to TPA's using an interface file extract.

- **Employer Refund** – The system determines if there is a credit on an employer account and available for refund if all dues are satisfied on an employer account. A batch program or staff can enter manually that an employer account has available credits. The system batch processes and generates a refund to an employer if all dues are satisfied.
- **TPS** – The system allows the staff user to request generation of a Data Sample for a TPS Universe using application screen. The system also has a process for Identifying a TPS Universe to show TPS details for a particular universe corresponding to a quarter/year.
- **SUTA** – The system checks for similarities with any other eligible employer reported by the same third-party agent or employer registering as a new employer based on entity name, physical address, owner(s) name and social security number. Also, the system crosschecks if a selected employer (A) has 20% (configurable number) or more employees reported on any other employer (B) in the next quarter following the reporting quarter then the selected employer has potentially engaged in SUTA dumping.
- **Certifications** – The system batch program reads an imported FUTA identification data file and control file (FUTA certification Request) and then creates an export FUTA certification file (FUTA certification response) for the employer year mentioned in the imported file. The exported FUTA certification file is uploaded into the IRS system.
- **Reimbursable** – The system generates a billing statement to a reimbursable employer based on dues for payments made to claimants. The employer can make online payments for the dues. The system batch program generates notice of delinquency to reimbursable employers as per the state's business rules. Staff members can contact employers if delinquency exists to collect the dues. The system also sends a notice of request of security details to employer and provides a second notice if details are not received. A batch program also checks if a reimbursable employer's account to see if a credit and debit exist for the same account. After identifying these accounts, the credit is then transferred to handle the debit. Staff can also use the application for transferring a payment from one reimbursable employer to another reimbursable employer.
- **Tax Collection** – The system sends the first notice and final notices to employers that are delinquent to file tax and wage reports and to make payments respectively according to State's business rules. The system then creates a warrant on an employer account after a final notice is sent to employer and if tax due is still unpaid according to State's business rules. The system also creates a garnishment after a warrant is created on an employer account and if tax due is still unpaid according to the state's business rules. The system sends the agency and a court-ordered subpoena to eligible employers as per employer account status.
- **Tax Data Validation and ETA** – The system has built-in features to handle the USDOL requirements in the Tax Performance System (TPS), Data Validation, and ETA reports. All ETA reports are automatically generated as per their frequency and made available to the agency user for submission. TPS universe, to prepare samples and maintain TPS case files, is also available. Various LMI reports and interfaces are built-in in the solution.
- **Audit** – A system batch generates the Eligible Employer Audit Pool for all eligible employers for a target year based on the State's selection criteria. An audit supervisor assigns eligible employer audits to auditors. The Auditor can perform audit scheduling or rescheduling in the system. The employer enters the audit questionnaire details into the system after receiving the details through the audit questionnaire notice. The auditor conducts an audit investigation into system and enters all the details that are submitted to the audit supervisor for review. The system sends the audit result letter to the employer based on adjustment made, if any, to the tax and wage report record details.
- **Financial Accounting** - The payments made to claimants for the benefits paid and the payments received from employers for tax due are accounted in the system. The system captures all journal entries for payments, repayments, and refund transactions and creates daily work items for the staff to review before transferring from the Trust Fund and Benefit Payment accounts. Also, the system creates a daily tax posting work item for staff to review employer tax due payments, penalty and interest, and training tax payments into the system. The staff reconciles daily and monthly transactions using inquiry screens and reports generated. The system creates data for monthly trial balance to reconcile and submit details for generation of Financial Accounting ETA reports.

### **2.1.3 Key System Features**

Following are the key system features of the proposed TCS UI solution:

- An integrated application for the agency staff, administrators, claimants, and employers. The application is built with Role Based Access Control (RBAC) to restrict unauthorized access to information. The security module is designed based upon a microservices architecture.
- The user interface is designed and tested to be accessibility compliant as per Section 508 of the Americans with Disability Act (ADA).
- The system ensures data integrity across functions and displays clear validation messages and guides claimant to enter correct data elements to maintain data integrity. Users are provided with pre-filled information wherever available to avoid duplicate entries and maintain consistency across data.
- The system supports both English and Spanish for claimant facing functionality. For internal users and employers, the solution supports only English.
- Integrates and interfaces with various systems and comes with all the federal and state specific common interfaces. The interface framework is flexible to configure new file based and web service-based interface. Web service-based interfaces are implemented using SOAP and REST protocols. The solution has core UI interfaces built-in and readily available. E.g., ICON, SIDES, IDH, SAVE, TOP, NDNH etc.
- The TCS proposed solution will integrate with existing KDOL applications as identified during the Gap Analysis phase of the project. These integrations will include state applications like IVR, Document Scanning & OCR system and Printing Systems. Further, TCS understands that additional integrations to identity verification systems and any other fraud services as defined within the interface specifications. TCS understands that the maintenance and support of these external applications will be the agency's responsibility unless otherwise defined through the change order process.
- Report and correspondence generation engine that has the capability to generate reports automatically based on business events or based on scheduled day and time without any manual intervention. Correspondences are stored in the Document Management System (DMS) and accessible to staff, claimants and employers based on configured permissions. Correspondence can be generated in bulk and sorted for mailing. The file can be shared with in-house or external vendor printing as per the requirements. As part of the proposed system, TCS will provide up to 350 correspondence templates, 310 reports (including all ETA reports), and 130 interfaces for integrating inbound and outbound communication with internal systems and external agencies. All of these items will be documented in the requirements and design documentation.
- 
- Business process management (BPM) system to create customizable workflows and assignment algorithms. Role based access to admin users for bulk assignment, reassignment, and termination of work items. Staff can search work items based on detailed search criteria and sort the results, add case notes. Work items provide integrated view of related functionality. Real-time reports include workload, active, pending and completed work items. Case notes are auto created based on configured system events and staff can also manually enter case notes.
- The system maintains audit trail of the user accessing application functionalities and business transactions. Configuration is kept at business rule engine, database, and application level. A custom-build search framework enables quick and effective search feature implementation for different functionalities.

## **2.2 In Scope**

### **2.2.1 Implementation of Benefits, Appeals and Tax System**

In summary, the project scope includes the following:

1. Program governance
2. Gap analysis, Identification of AS-IS and gap requirements and requirements finalization.

3. Design of identified gaps, configuration and customization, and testing
4. Implementation of internal and external interfaces
5. Data migration. KDOL will cleanse and extract the existing data from the legacy system to a common, agreed upon format. TCS will load the data into the new UI system.
6. Configuration and creation/modification of correspondences and reports
7. Organizational change management
8. Creation of training material and delivery of training using Train-the-Trainer approach. The train-the-trainer approach will be used for both staff and technical training.
9. Go-Live
10. Assessment, configuration and management of end-to-end cloud hosting and set up including security and networking with the assistance of KDOL
11. Set up of development, system testing, training/Gap, User Acceptance Testing (UAT), Data Migration, Disaster Recovery (DR) and production environments.
12. Warranty support for a period of 12 months.
13. Maintenance and operations support

### **2.3 Optional Items**

The following optional item can be exercised by KDOL using formal change order process and execution of a separate license agreement:

- Implementation of TCS Fraud Analytics and Sentiment Analysis Solution

## **3 Program Governance**

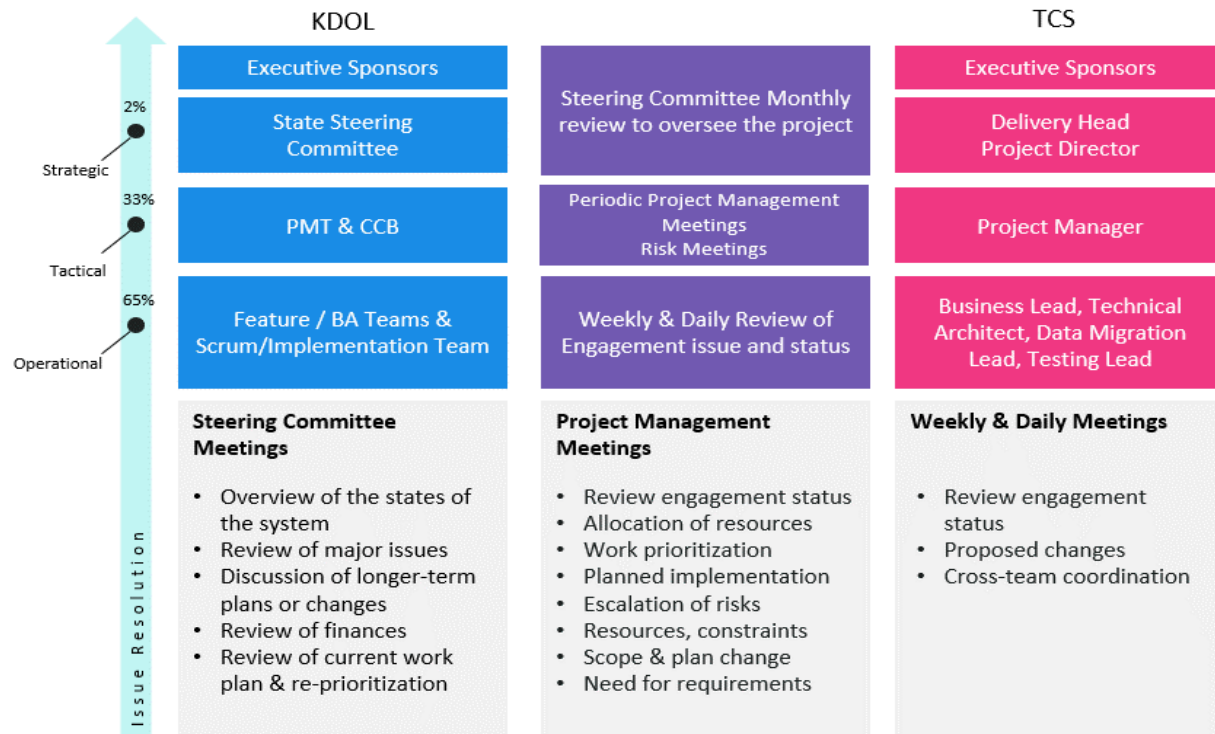
This section details the governance aspects for KDOL Unemployment Insurance modernization program. As part of our implementation, TCS will work together with KDOL to review and conform to the requirements and procedures defined by the Kansas Information Technology Office (KITO).

### **3.1 Project Stakeholders**

A formal governance structure will be put in place for the project. It will consist of:

- Steering Committee
- Project Management Team
- Risk Management Board
- Change Control Board

These committees and teams will periodically meet to perform their responsibilities as shown in the figure below:



**Figure 1: Governance Teams**

### Kansas Information Technology Executive Council (ITEC)

TCS will provide KDOL with any project reporting, status updates and/or presentation materials necessary for KDOL to update the ITEC within the regularly scheduled meetings.

### Steering Committee

A Steering Committee will be formed after discussion with KDOL which will comprise of both KDOL and TCS representatives who will be acting as the governing body for the overall monitoring the project progress, steering the project toward completion and helping the project team in resolving key issues.

Steering Committee will:

- Review project status against plan and direct corrective action plan to maintain progress as per plan
- Approve significant changes to project plan and processes
- Proactively identify issues with respect to scope of the project, cost and budget, performance and delivery of project
- Settle disputes/issues escalated to the committee
- Guide and help in mitigating any key risks escalated to the executive committee
- Monitor the fulfilment of contractual terms and compliance to applicable laws and regulations
- Make all financial decisions
- Approve significant scope, schedule and cost changes

### **Project Management Team (PMT)**

A Project Management team will be formed after discussion with KDOL which will comprise of both KDOL and TCS representatives who will be acting as the project management body for planning the project and executing as per the approved project plan.

Project Management Team will:

- Define project plan including project activities, deliverables, responsibilities, dependencies and milestones.
- Execute approved project plan(s) and be responsible for the day-to-day operations of the project
- Develop detailed plans for implementing the project, including plans for budgets, staffing, communication, and conducting the regular business of the project
- Establish procedures for conducting the business of and making decisions for the project
- Report project updates and status reports as per defined frequency
- Oversee the timeliness and quality of the delivery of products and services
- Escalate decisions regarding program scope, cost, budget, or timeline, and risks to the Steering Committee

### **Risk Management Board**

A Risk Management Board will be formed after discussion with KDOL and KITO, which will comprise of both KDOL and TCS representatives who will be acting as the governing body for identifying and managing risks associated with the program. Included within the inception of the Risk Management Board will be the completion of the Risk Assessment Module (RAM) as defined with the KITO guidelines.

The Risk Management Board will:

- Meet regularly to review and prioritize risks
- Provide mitigation for the identified and approved risks
- Approve risk mitigation plan
- Escalate risks to the Steering Committee, if required

### **Change Control Board (CCB)**

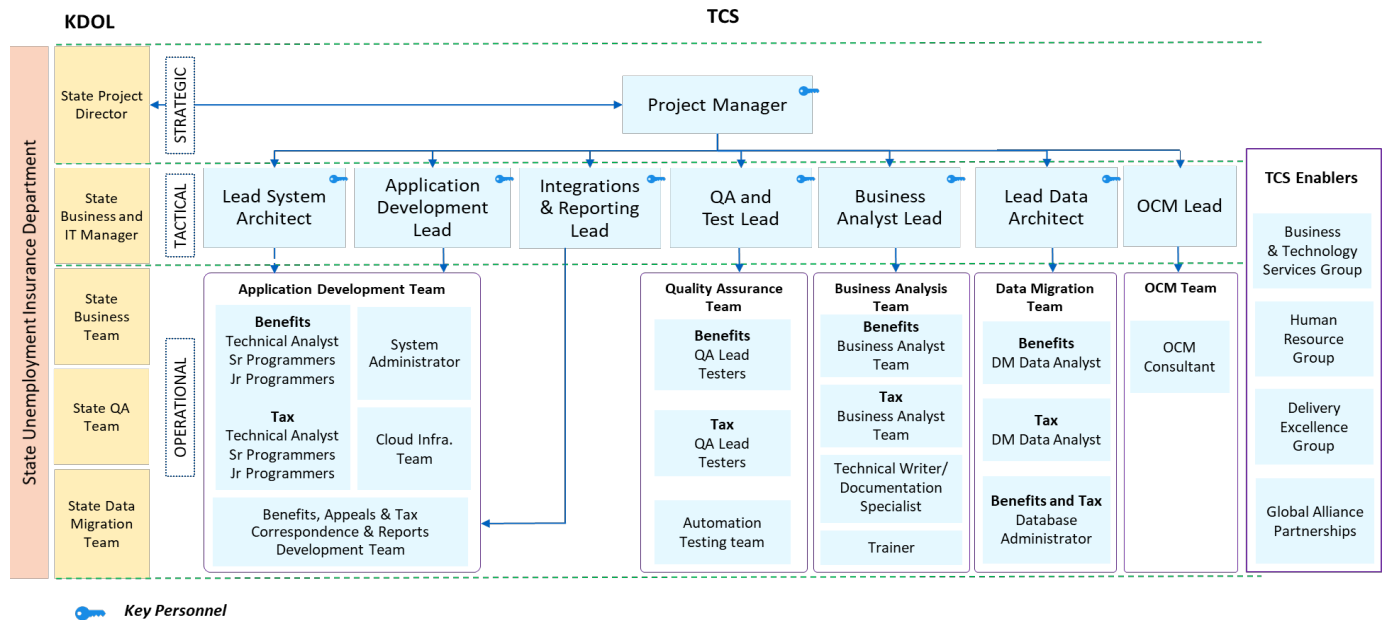
A Change Control Board will be formed after discussion with KDOL which will comprise of both KDOL and TCS representatives who will be acting as the governing body for maintaining and managing changes identified at the program level. KDOL has the controlling authority of this board, and is the only entity that has voting rights.

Change Control Board will:

- Review the importance and relevance of a change
- Conduct and manage gap analysis for the identified changes
- Be responsible for change management and scope management
- Review and approve change impact consisting of scope, solution, timeliness and cost
- Present impact of key changes to the Steering Committee

### 3.2 Project Organizational Chart

The figure below demonstrates the different teams from TCS and KDOL and how they are interrelated to the project tasks and activities. Please note that multiple roles can be filled by the same resource.



**Figure 2: Program Organization Chart**

#### Key Personnel

Before the conclusion of the Initiation and Planning Phase, TCS will define the key personnel for the project. If for any reason that one of these people need to leave their role on the project, TCS will work with the State of Kansas to replace the individual with a mutually acceptable resource.

### 3.3 Resource Management

This section lists TCS and KDOL key stakeholders along with their high-level responsibilities. Please note the below table only identifies key responsibilities and does not include every activity that needs to be performed in the project.

**Table 2: Stakeholders**

| #  | Stakeholder | Responsibility   |
|----|-------------|--|
| 1. | TCS         | Primarily responsible for: <ul style="list-style-type: none"> <li>Project planning</li> <li>Project Management</li> <li>Environment setup including cloud hosting, security and network</li> <li>Requirements definition</li> <li>Design</li> <li>Development</li> </ul> |

| #  | Stakeholder                  | Responsibility  |
|----|------------------------------|---|
|    |                              | <ul style="list-style-type: none"> <li>• System Integration and Testing</li> <li>• Data migration, validation and verification, subject to KDOL approval and data cleansing</li> <li>• Partner with KDOL for Organizational Change Management (OCM) project related activities</li> <li>• Train-the-trainer training</li> <li>• Project documentation (User Manuals)</li> <li>• System Implementation Preparedness</li> <li>• Maintenance and operations.</li> </ul> <p>Will provide support in:</p> <ul style="list-style-type: none"> <li>• Gap Analysis</li> <li>• UAT</li> <li>• Go-Live</li> </ul>   |
| 2. | KDOL Project Management Team | <p>Primarily responsible for:</p> <ul style="list-style-type: none"> <li>• Project management</li> <li>• Project planning for KDOL</li> <li>• Vendor management</li> <li>• KDOL team management</li> <li>• Operational readiness management</li> <li>• Approval of deliverables and milestones</li> <li>• Communication with external and internal stakeholders</li> <li>• Performing user acceptance testing. KDOL will coordinate with the business staff to conduct UAT, with TCS's support.</li> <li>• Coordinate acceptance of the system</li> <li>• Go-Live</li> </ul> <p>Will provide support to TCS in:</p> <ul style="list-style-type: none"> <li>• Project planning</li> <li>• Project governance</li> <li>• Train-the-trainer user training</li> </ul> |
| 3. | KDOL Business                | Primarily responsible for   |



| #  | Stakeholder | Responsibility  |
|----|-------------|---|
|    |             | <ul style="list-style-type: none"> <li>• Business case/context documentation for gaps</li> <li>• Perform operational readiness activities</li> <li>• Resolve queries from TCS team</li> <li>• Design correspondence templates</li> <li>• Test scenario creation</li> <li>• Review program documentation (functional)</li> <li>• Partnering with TCS on Organizational Change Management (OCM) Activities</li> <li>• End user training</li> <li>• User roles configuration</li> <li>• Perform UAT</li> <li>• Dry run</li> <li>• Acceptance of the system</li> </ul> <p>Will provide support in :</p> <ul style="list-style-type: none"> <li>• Validating and verifying data related to the data conversion</li> <li>• Train-the trainer training</li> <li>• FTI data masking, migration</li> </ul> |
| 4. | KDOL IT     | <p>Primarily responsible for</p> <ul style="list-style-type: none"> <li>• Data extraction from legacy system</li> <li>• Define data validation scenarios and test the scenarios</li> <li>• Data cleansing in the source system</li> <li>• Any necessary changes to source systems in order to fulfill project duties</li> <li>• Leading communication and liaison with external agencies for interfaces, understanding that TCS will be assisting KDOL in these discussions.</li> <li>• FTI data masking and migration</li> <li>• Seek approvals from IRS, SSA and any other agency for the project</li> <li>• Procurement of any hardware/software/services not</li> </ul>   |

| # | Stakeholder | Responsibility  |
|---|-------------|---|
|   |             | <p>covered within this SOW</p> <p>Will provide support in:</p> <ul style="list-style-type: none"> <li>• Environment setup including security and networking</li> <li>• Data migration</li> <li>• Assisting the business in performing UAT</li> <li>• Batch scheduling</li> <li>• System implementation preparedness</li> <li>• Go-Live</li> </ul> |

### 3.4 Communication

KDOL and TCS will use communication tools such as online chat, video conferencing, etc. A high-level understanding on the communication methods and tools is provided in this section.

**Table 3: Communication Methods**

| #  | Audience  | Methods                | Purpose and Description  |
|----|---|------------------------|--|
| 1. | One-to-One and Group Chat                                     | Instant Messaging (IM) | KDOL will provide to all program team members, the ability to communicate using the Microsoft Teams platform   |
| 2. | One-to-One  | Phone Call/SMS         | Contacting team members for time sensitive information via their office/desk phone is the preferred method of phone communication for quick and easy answers.                        |
| 3. | One-to-Many   | Email                  | KDOL will provide to team members an email account to send/receive email communications. Project correspondence should be sent to an email account provided to team members by KDOL. |
| 4. | One-to-Many   | Conference calls       | Conference calls will be used when working with distributed teams.   |
| 5. | Information Sharing and collaborating with a limited audience | Video Call             | Video conference capabilities in KDOL will be used in coordinating and conducting project activities.  |
| 6. | Information Sharing and collaborating with a limited audience | Face-to-face           | Face-to-face meetings will be used to have discussion within the team or discussion with KDOL. Face to face meeting is preferred for critical and sensitive meetings.                |

### 3.5 Change Management

TCS and KDOL will jointly develop a change control process that will be approved by KDOL, and will be utilized for all aspects of the KDL UI System Modernization project, which includes benefits, tax and appeals. For clarity, a change request refers to a new requirement or modification to an existing requirement. Change requests can exist when there is either no prior solution within the existing application to fulfil a business need, or if an existing solution exists, but requires modification. Any changes to the scope identified for the program will go through change control process. KDOL will accept the system as-is where it fits the defined requirements.

The Change Control Board (CCB) is the governing body, which controls and manages all changes and scope. CCB is made up of representatives from KDOL and TCS. The CCB will serve as the final arbitrator of the priority of developing code or making database/infrastructure changes to the application to ensure overall application acceptance. To the extent an item can't be resolved at the CCB, the item would be escalated to the Steering Committee.

The lifecycle of a change request will be recorded in AWS DEVOPS. A change request will go through different stages in its life cycle as mentioned below.

- **Logged:** This is the initial state of the change request where and when the requested change is documented.
- **Reviewed:** This is the state after the change request has been documented by KDOL members with the source, system impact, and detailed requirement. In addition, the linkage must have been made to the Epic/Feature as appropriate.
- **In Analysis:** This is the state, which indicates that TCS is determining the detailed scope, schedule, and resource/cost impact of the change request.
- **Pending Approval:** This is the state, which indicates that a proposed solution has been documented by TCS and the change request is ready for approval by KDOL.
- **Escalated:** This is the state, which indicates that further advancement of change request will require CCB's agreement and/or approval.
- **Deferred:** This state is an indication that the change request's functionality is on the backlog and not been approved for development.
- **Cancelled:** This is the state, which indicates that the change request is no longer necessary.
- **Approved:** This is the state, which indicates that the change request has been approved by the Change Control Board to be planned for development.

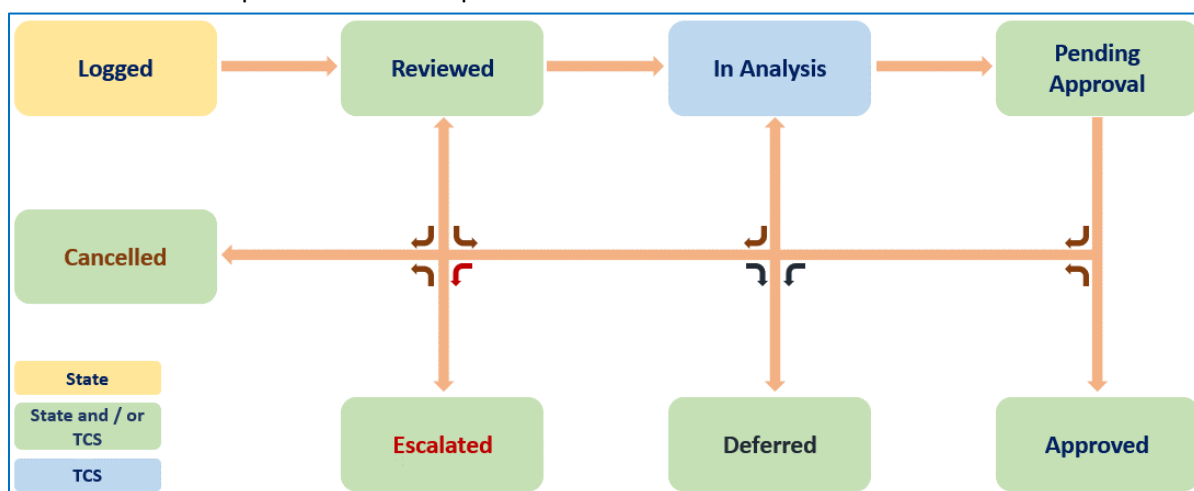


Figure 3: Life Cycle of a Change Request

### 3.5.1 Impact Analysis

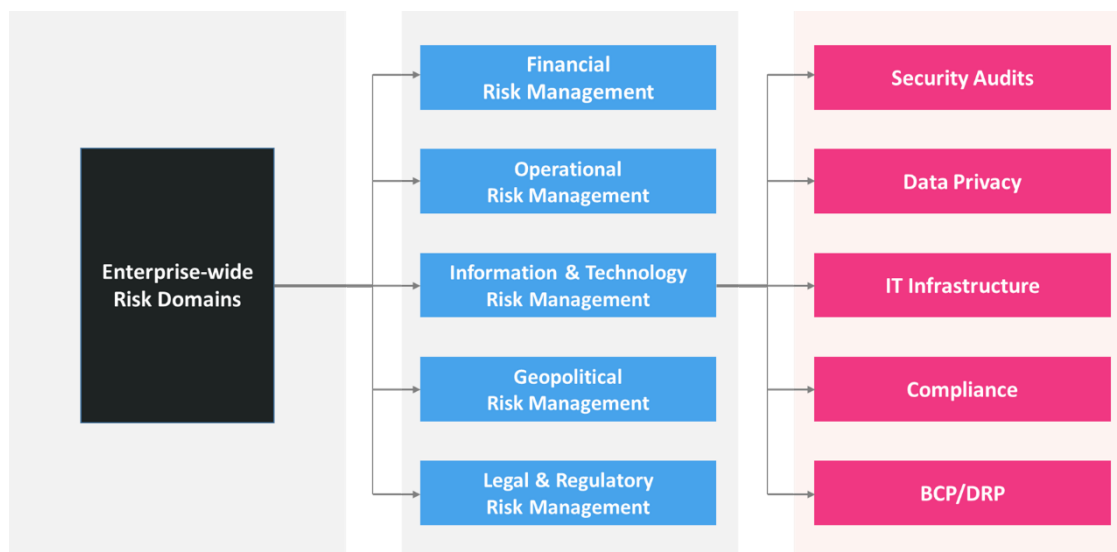
Based on the information in the change request, TCS will analyze the impact of the change. The analysis will include the following:

- Impact on items and dependencies (e.g., documents, code, test cases, cloud infrastructure and software)
- Impact on project schedule and activities in progress
- Estimated change in effort (in person days) and the cost impact
- Possible implementation alternatives
- Description of proposed change
- Business/statute/regulation justification for change
- Business processes affected by the change
- Responsibility for implementing the change and updating program artifacts to reflect the change
- What effect the change will have on the system
- When the change should occur
- Review and test plan for the proposed change
- Additional training and documentation needed for both support staff and end users

### 3.6 Risk Management

A Risk Management Board will be formed after discussion with KDOL which will comprise of both KDOL and TCS representatives. This risk management board will ast as the governing body for maintaining and managing the risks identified at the program level. The project will follow the State of Kansas ISO and ITEC guidelines as dictated by the Kansas Information Technology Office.

The broad picture for enterprise risk management, and information and technology risk is as shown in the following figure:



**Figure 4: Enterprise Risk Management and Information and Technology Risk**

TCS and KDOL will focus on the above-mentioned risk factors and then develop appropriate mitigation plans throughout the project life cycle.

Risk management comprises of risk assessment and risk control. Risk assessment involves identification, analysis and prioritization of risk items. Risk control involves planning, resolution and monitoring. TCS will develop a risk register and issue management document as a part of the quality process and maintain throughout the project life cycle.

The major risks associated with modernization of the UI project, which could have an impact on effort, schedule, quality or client satisfaction, will be identified jointly at the beginning of the project and monitored continuously by TCS and KDOL. Appropriate action will be taken to reduce risks based on avoidance, mitigation or contingency plans outline for each of the risk.

**Table 4: Functions used in Risk Management Strategy**

| Function | Description  |
|----------|--|
| Identify | Search for and locate the risks before they turn into problems.  |
| Analyze  | Assess the risks based on probability of occurrence and impact and then prioritize the risks.                                      |
| Plan     | Translate risk data into decision- making information. Evaluate impact, probability, and timeframe, classify and prioritize risks. |
| Track    | Monitor risk indicators and mitigation actions.  |
| Control  | Correct deviations from the risk mitigation plans.   |

The high-level activities of the risk management Approach are detailed below:

- Brainstorming on process and product failures will be carried out and potential failure modes will be listed, with the susceptible items clearly identified.
- The KDOL's perspective on the effect of failure will be described and a severity rating will be attached.
- The possible causes of these failures are identified and documented. These are then granulized to a low level so that corrective action and control is possible. A probability value is assigned to each cause.
- Existing controls to detect or prevent failure will be described and a detection score will be attached.
- Severity, occurrence and detection are rated on a scale (usually from 1 to 10), for each failure. Risk Priority Numbers (RPNs) are calculated as the product of severity, occurrence and detection. Failures with the highest RPNs are identified and action to attenuate each of the three factors will be decided and documented.
- Deadlines and responsibilities are assigned, action implemented, severity, occurrence and detection reassessed and RPN re-calculated. These will be shared on a regular risk assessment review meeting with KDOL.

### **3.7 Issue Management**

A high-level understanding on the issue management process is provided in this section.

An issue is a realized risk. Once an issue is reported, an analysis is carried out for impact and severity. Post analysis, a classification is assigned to the issue. Based on the severity of the issue, it is escalated for resolution. Issues can be escalated at the owner's discretion based on their severity and the issue's age as follows:

- Critical - 5 Days

- Major - 10 Days
- Moderate - 22 Days
- Minor - 44 Days

TCS and KDOL PMs will provide full support and facilitate the execution of resolution plan against issues. They will also ensure a root-cause analysis is conducted for major issues and the learning is properly documented. This will help avoid such issues going forward. The issues will be discussed in project management meetings and the ones that are critical will be put up for discussion and guidance in the steering committee meetings.

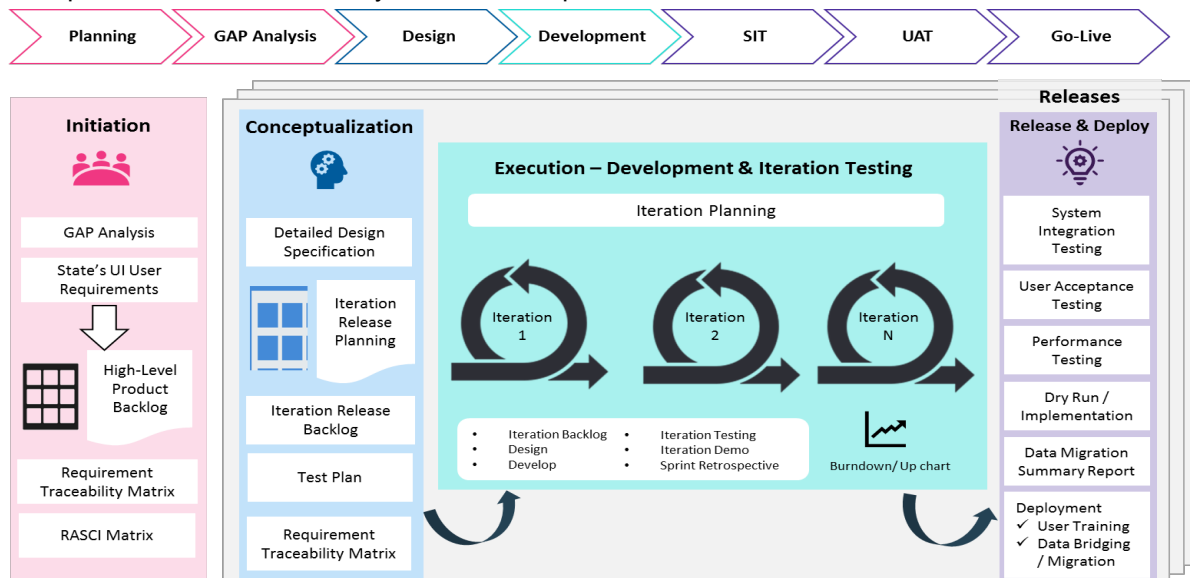
Potentially reoccurring risks will be added to the risk register and reviewed timely to avoid them from reoccurring.

## 4 Project Implementation Approach

The modernized benefits, appeals and tax systems for KDOL Unemployment Insurance will be deployed in a single release as a big bang deployment.

Though the deployment is in a single release, TCS will follow a hybrid agile development methodology. The iterative approach allows KDOL to receive releases in small increments without overwhelming the team while observing successful project progress. Data migration will be integrated into the iterative approach.

The figure below provides an overview of the iteration process. TCS understands that in providing KITO status reports, the format and structure may deviate from this agile approach to more of a waterfall approach. TCS will work with KDOL to provide the data necessary to fulfill the requirement.



**Figure 5: Implementation Approach**

Project initiation phase will kick off the project. Post project initiation phase, other SDLC phases namely, gap analysis, design, development, and testing phases will be executed for the pre-defined sets of functionalities for each iteration.

Typically, gap analysis is performed in multiple waves with the functionality logically grouped for comprehension and ease of flow. Once requirements are finalized, development and configuration is planned in multiple iterations. Development, testing and an incremental system and integration testing will be built into each iteration. Migrated data will be fed into certain planned iterations as progress is made.

The last few iterations will be planned for a thorough system integration and testing with fully migrated data.

KDOL user acceptance testing will be planned at the end of certain iterations when milestones are met and ready for acceptance. Milestones will be defined as the completion of wholesome functionality that can be tested and accepted with minimum dependency on pending functionality.

With this incremental iterative approach, both TCS and KDOL will have opportunities to experience the system early in the software development lifecycle and provide valuable feedback early in the plan thereby mitigating an inherent risk of misunderstood requirements.

Upon completion of all iterations, full scale system integration testing and user acceptance testing will be performed. These phases will be followed by system go-live and warranty support phases.

Details of these phases are mentioned in the following sub sections.

## 4.1 Project Initiation and Planning

In this phase, TCS and KDOL will initiate the project. A detailed project schedule followed by a detailed project plan will be defined with mutual agreement between KDOL and TCS.

TCS and KDOL will identify the responsibility for each deliverable in the detailed project plan at the beginning of the project/phase.

TCS will work with KDOL to finalize the format and the determine the frequency in which the plan will be updated during the project initiation phase.

During this phase, expectations for all stakeholders will be set, all project planning will be completed in detail, including various governance templates that are to be used during the execution of the project. This phase also includes setting up the development environment (tools) and creating the approved acceptance criteria for all program deliverables.

**Table 5: ETVX for Initiation and Planning**

| Activity type  | Activity  | Responsibility |
|----------------|---|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>Signed contract</li> <li>Statement of work</li> </ul>      |                |
| Tasks          | Finalize the program charter and get base code and documentation from the State of Mississippi.   | KDOL           |
|                | Prepare and finalize the kick-off presentation  | TCS, KDOL      |
|                | Conduct kick-off meeting  | TCS, KDOL      |
|                | Prepare project management plan including program activities, roles, and responsibilities for TCS | TCS            |
|                | Prepare Program Budget Plan   | TCS, KDOL      |
|                | Prepare Program Governance Plan   | TCS, KDOL      |
|                | Finalize Program Organizational Chart   | TCS, KDOL      |
|                | Prepare Project Plans   | TCS, KDOL      |
|                | Prepare Communications Plan   | TCS, KDOL      |
|                | Finalize template for Decision Logs   | TCS, KDOL      |
|                | Finalize template for Status Reports  | TCS, KDOL      |
|                | Prepare Resource Management Plan  | TCS, KDOL      |
|                | Prepare Change Management Plan  | TCS, KDOL      |
|                | Prepare Risk Assessment Model   | TCS, KDOL      |
|                | Prepare Risk and Issue Management Plan  | TCS, KDOL      |
|                | Finalize template for Monthly Financial Reporting   | TCS, KDOL      |
|                | Prepare acceptance criteria document for all deliverablesO  | TCS, KDOL      |



| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>Finalize Detailed KITO Documents (Project Plan, Risk Management Plan)</li> </ul>   | KDOL, TCS      |
|               | <ul style="list-style-type: none"> <li>Setup environment for gap analysis (analysis and requirements finalization) phase</li> </ul>   | TCS, KDOL      |
| Validation    | <ul style="list-style-type: none"> <li>Project plans - review and signoff</li> <li>Obtain KITO Authorization</li> <li>Deliverable acceptance criteria - review and signoff</li> </ul> | KDOL, TCS      |
| Exit Criteria | <ul style="list-style-type: none"> <li>Sign-off – initiation and planning phase deliverables</li> </ul>   |                |

Deliverables for the initiation and planning phase as per KDOL requirements are:

**Table 6: Deliverables for Initiation and Planning**

| Task 1                 | Deliverable                                |
|------------------------|--|
| Plan and Setup Project | <b>1A</b> - Program Budget Plan            |
|                        | <b>1B</b> - Program Governance Plan        |
|                        | <b>1C</b> - Program Organizational Chart   |
|                        | <b>1D</b> - Project Plans                  |
|                        | <b>1E</b> - Communications Plan            |
|                        | <b>1F</b> - Decision Logs                  |
|                        | <b>1G</b> - Status Reports                 |
|                        | <b>1H</b> - Resource Management Plan       |
|                        | <b>1I</b> - Change Management Plan         |
|                        | <b>1J</b> - Risk Assessment Model          |
|                        | <b>1K</b> - Risk and Issue Management Plan |
|                        | <b>1L</b> - Monthly Financial Reporting    |

#### **4.1.1 Project Plan**

TCS will create a Microsoft project-based schedule for all milestones and Software Development Life Cycle (SDLC) activities. This plan will be used to track the planned dates for the phases and milestones. This plan will be created and delivered to KDOL during program planning and initiation phase, shared on an ongoing basis with all stakeholders. The detailed project plan will follow KITO standards, and will define detailed tasks, such that any one task will not exceed 80 hours. Further, the plan will identify and assign all necessary resources, create dependencies, and identify the critical path for the project.

## 4.1.2 Project Schedule

The figure below provides the high-level timelines for the KDOL UI transformation project.

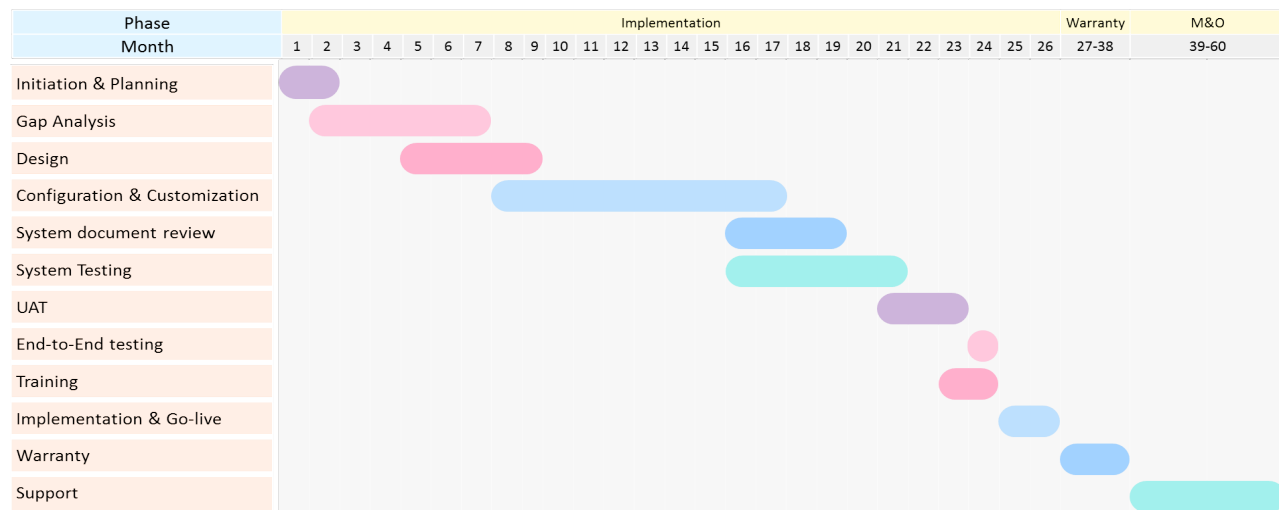


Figure 6: KDOL UI Project Schedule

## 4.2 Gap Analysis

TCS has proposed using the ReEmployUSA Consortium solution, specifically the State of Mississippi version, as the base solution for the modernization of KDOL Unemployment Insurance system including Benefits, Appeals and Tax functions. The traditional requirements definition will be accomplished through the gap analysis phase.

The objective of this phase starts with understanding the existing KDOL business process and comparing them with the base solution. The gap analysis will be done through a series of interactive sessions with KDOL stakeholders to elicit, compare and validate requirements. TCS will work with KDOL to identify the commonality and the differences based on KDOL law, statutes, regulations and policies, compared to the base solution features and capabilities.

The gap analysis phase will include the following:

- Identify stakeholders to be part of the gap sessions
- Schedule and conduct gap sessions to obtain a detailed understanding of the KDOL business.
- Use accepted methods for recording the sessions to accurately maintain the outcome.
- Provide the outcome to the attendees for confirmation.

The gap analysis sessions will:

- Provide the stakeholders an elaborate understanding of the base solution
- Assist the stakeholders to identify the common features and differences between KDOL business process and the base solution using a walkthrough of the base solution as a starting point.
- Provide an opportunity to explore or clarify functional areas in detail.
- Define the to-be system
- Resolve conflicts, inconsistencies and communication gap between stakeholders' understanding of the to-be system.

TCS will produce a requirement traceability matrix that will track requirements identified during the gap analysis to the business processes. The traceability will also document requirements not present in the base solution or the requirement needs to be configured and/or customized for KDOL in the base solution.

The requirements matrix will be baselined and tracked and updated through all phases of SDLC especially related to business process documentation, detail design, test plans, test case and system components..

TCS will follow the below ETVX activities for the gap analysis process.

**Table 7: ETVX for Gap Analysis**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>• Project plan</li> <li>• Availability of KDOL and TCS teams for gap sessions</li> <li>• Availability of the base system</li> <li>• Availability of the base system documentation</li> </ul>  |                |
| Tasks          | <ul style="list-style-type: none"> <li>• Identify all in-scope KDOL UI processes</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Perform gap analysis               <ul style="list-style-type: none"> <li>○ Publish gap sessions schedule</li> <li>○ Conduct gap sessions, identify and categorize gaps</li> </ul> </li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Document gaps</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>• Review and finalize gap documents</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Develop prototypes on new requirements not covered by the base solution</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>• Identify internal interfaces</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Identify external interfaces</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Create an interface inventory document</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>• Review and approve the interface inventory document</li> </ul>  | KDOL           |
|                | <ul style="list-style-type: none"> <li>• Prepare interface formats</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Prepare non-functional requirements specifications</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>• Prepare high level technical design document</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>• Create requirements matrix</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>• Create requirements to business process mapping</li> </ul>  | TCS            |
| Validation     | <ul style="list-style-type: none"> <li>• Gap analysis document - review and signoff</li> <li>• Non-functional specification document - review and signoff</li> <li>• High level technical design document - review and signoff</li> <li>• Interface inventory document - review and approve</li> </ul> | KDOL           |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>Interface formats - review and approve</li> <li>Requirements matrix – review and approve</li> <li>Requirements to business process mapping – review and approve</li> </ul>   |                |
| Exit Criteria | <ul style="list-style-type: none"> <li>Signed off gap analysis document</li> <li>Signed off non-functional specification document</li> <li>Signed off high level technical design document</li> <li>Approved interface inventory document</li> <li>Approved interface formats</li> <li>Approved list of correspondence</li> <li>Approved list of reports and dashboards</li> <li>Baselined requirements matrix</li> <li>Baselined requirements to business process mapping</li> </ul> |                |

Deliverables for the Gap Analysis phase as per KDOL requirements are:

**Table 8: Deliverables for Gap Analysis**

| Task 2              | Deliverable  |
|---------------------|--|
| Manage Requirements | <b>2A</b> - Requirements Matrix                      |
|                     | <b>2B</b> - Requirements to Business Process Mapping |

In addition to the KDOL required deliverables, TCS will produce the gap analysis and non functional specification document(s), interface inventory and formats and a high level design document. This will not only augment KDOL RFP requirements, but also serve as a valuable resource for clear understanding of the requirements and mitigate the risks associated with incorrect and missed requirements.

KDOL will provide timely access to its relevant personnel and departments to gather requirements, conduct gap analysis and as otherwise necessary during the project phases.

KDOL staff will be responsible for confirming requirements and business needs at the gap phase.

If required, KDOL will be responsible for any modifications required to its legacy systems which will interface with the modernized UI System.

### **4.3 Design**

TCS will analyze and classify all requirements based on the business process areas. Design specifications will be created to cover all business process areas. TCS will work closely with KDOL team during the design phase of the project and ensure that all requirements are understood clearly and provide easy to understand process flow, business rules, validations, security, roles, integration points, error messages, reports, correspondences, and data structures. One important aspect of integration is design specification for all external and internal interfaces that will be documented in this phase. The specifications will include type of integration to be implemented and layout of data to be exchanged.

The ETVX for design will follow the standard activities as described for other processes.

**Table 9: ETVX for Design**

| Activity type  | Activity  | Responsibility |
|----------------|---|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>Functional specification documents (requirements artifacts)</li> <li>Non-functional specification document</li> <li>High level technical design document</li> <li>Requirements matrix</li> <li>Interface inventory</li> </ul>  |                |
| Tasks          | <ul style="list-style-type: none"> <li>Create database design model for KDOL gaps</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Create integrations design document for KDOL gaps</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Create functional security design document for KDOL specific roles</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Create workflow design document for KDOL gaps</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Create KDOL report and correspondence templates</li> </ul>   | KDOL           |
|                | <ul style="list-style-type: none"> <li>Create user stories for the development phase including acceptance criteria</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Setup design and development environment in the cloud</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Update requirements matrix.</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Create Test Plans and Test cases</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Finalize the design artifacts with KDOL related updates</li> </ul>   | TCS, KDOL      |
| Validation     | <ul style="list-style-type: none"> <li>Design documents - review and sign-off               <ul style="list-style-type: none"> <li>Process flow diagrams</li> <li>User Stories and acceptance criteria</li> <li>Report and Correspondence templates</li> <li>Database model</li> <li>Interface design</li> <li>Role mapping and security</li> </ul> </li> </ul> | KDOL, TCS      |
| Exit Criteria  | <ul style="list-style-type: none"> <li>Approved process flow diagrams, user stories and acceptance criteria for development</li> <li>Approved roles and security</li> <li>Signed off database model</li> <li>Signed off interface design document</li> <li>Signed off report and correspondence templates</li> </ul>  |                |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>Updated requirements matrix</li> </ul> |                |

Deliverables for the gap analysis phase as per KDOL requirements are:

**Table 10: Deliverables for Design**

| Task 3                                | Deliverable   |
|---------------------------------------|---|
| Design Holistic UI Replacement System | <b>3A</b> - Integrations Design   |
|                                       | <b>3B</b> - System Design Documents<br>(Process flow diagrams, database model, role and security design, reports and correspondence template) |

#### 4.4 Infrastructure Assessment

TCS proposes cloud hosting of the KDOL UI Modernized system on the AWS FedRAMP certified cloud infrastructure.

The TCS infrastructure team will perform a detailed assessment of the KDOL procured AWS infrastructure to ensure that the hosting location is reliable, secure, scalable, and compliant with FedRAMP, SSA & IRS Pub 1075 guidelines. As part of this assessment, TCS team will execute all the test cases provided by IRS to ensure that the infrastructure setup meets the requirements provided by the federal government. TCS team will also be using performance-monitoring tool to simulate the load on the system with respect to volume and concurrent users and will benchmark the infrastructure sizing with the volume and concurrent user requirements of KDOL.

On completion of the infrastructure assessment, TCS will present a detailed report which will have gaps identified along with the performance results and any additional hardware/software requirement.

**Table 11: ETVX for Infrastructure Assessment**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>KDOL AWS Cloud infrastructure environment</li> </ul>  |                |
| Tasks          | <ul style="list-style-type: none"> <li>Perform infrastructure assessment per RFP</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Perform Security Testing</li> <li>Perform performance testing</li> <li>Create and maintain infrastructure environments based on project schedule</li> </ul> | TCS            |
|                | <ul style="list-style-type: none"> <li>Establish connectivity between all development sites</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Infrastructure assessment report - review and sign-off</li> <li>Recommendations on hardware/software and security</li> </ul>                                | KDOL, TCS      |
| Exit Criteria  | <ul style="list-style-type: none"> <li>Signed off Infrastructure Assessment report</li> </ul>  |                |

Deliverables for the infrastructure assessment as per KDOL requirements are:

**Table 12: Deliverables for Infrastructure Assessment**

| Task 4                | Deliverable                           |
|-----------------------|---------------------------------------|
| Assess Infrastructure | 4A – Infrastructure Assessment Report |

## **4.5 Configuration and Customization**

This section describes the activities, deliverables and tools required to complete the configuration and customization of the KDOL UI Modernized system.

TCS will utilize a combination of the AWS DevOPS suite and ServiceNow tool as the preferred application lifecycle management tool, which included version control and configuration management. TCS assumes that KDOL will configure and maintain this environment, given these tools exist within the KDOL environment today..

The TCS team will follow a Hybrid Agile development approach for the configuration and customization phase. TCS will configure the base solution and implement the customizations as per the identified gaps. Unit and iteration testing of all identified changes will be performed to ensure changes are consistent with the approved design. The customization and configuration phase will be applicable to each iteration/cycle.

The TCS team will follow a sprint cycle with multiple iterations. Stories captured in the design phase will be prioritized for sprint backlogs based on the dependency and criticality of the application.

Major activities will be planned across the sprint cycles, according to Scrum principles

1. Sprint planning meeting
2. Daily scrum meeting
3. Sprint review meeting
4. Retrospective meeting

This phase involves configuration, customization or fine-tuning of different functionalities of the base solution as per the KDOL requirements.

- A software development plan will be created for each program area that will list down all the user stories to be planned for each sprint
- Standards and guidelines document will be updated based on the best practices and lessons learned from other TCS implementations and will be shared with developers before the start of customization process
- For each user story, TCS team will follow the unit testing and code review process
- For each sprint, TCS team will conduct the functional testing (for specific business process) as well as sprint testing (for all user stories of the sprint) and record results
- Application demonstration will be scheduled with KDOL after completion of key business processes to receive early feedback
- Any updates or additions to the database model will conform to the project database design standards established for the project.
- Code quality check is performed with each build
- Performance testing is conducted for key business processes to ensure compliance with application response requirements

- An updated requirements matrix is provided after the completion of this phase
- The change in the requirement documents, design documents, use cases, analysis models, design models, source code, test plan etc., will be versioned using the configuration management tool. Implementation of version control for change management for the KDOL will be:
  - Maintaining and recording baseline data, products and documents that are released
  - Changes to baselined data, documents and products will be controlled by change control procedures
  - CRs (Change Requests) will be used to trace the software items affected by the change
  - All the source code will be version controlled through the GitHub tool (integrated with AWS DevOPS and ServiceNow) which will track the addition, deletion, and modification actions applied to files and directories.

Using the ETVX process, TCS will define the activities and associate responsibilities to each major activity.

**Table 13: ETVX for configuration and customization**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>• Database model</li> <li>• Interface design document</li> <li>• Functional security design document</li> <li>• Workflow design document</li> <li>• Correspondence templates</li> </ul> |                |
| Tasks          | • Prepare Configuration Management Plan  | TCS            |
|                | • Develop application programs – iterative (agile sprint cycle)  | TCS            |
|                | • Perform code-walkthrough of the developed programs   | TCS            |
|                | • Close code-walkthrough comments  | TCS            |
|                | • Perform configurations for the processes   | TCS            |
|                | • Create automated unit test scripts for new functionality being developed for KDOL  | TCS            |
|                | • Perform unit testing of developed programs   | TCS            |
|                | • Create/update system test scenarios and related test cases   | TCS            |
|                | • Create/update UAT test scenarios and related test cases  | KDOL           |
|                | • Close all unit testing defects   | TCS            |
|                | • Update requirements matrix.  | TCS            |
|                | • Perform code quality coverage with rule set approved by KDOL   | TCS            |
| Validation     | <ul style="list-style-type: none"> <li>• Review and sign off Configuration Management Plan</li> <li>• Code walkthrough and closure of the code walkthrough defects</li> </ul>  | TCS            |



| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>Unit testing and closure of the unit testing defects</li> <li>Map user stories with requirements in the Jira tool as part of requirement matrix</li> </ul> |                |
| Exit Criteria | <ul style="list-style-type: none"> <li>Ready for system testing application code</li> <li>System test plan</li> <li>System test cases</li> </ul>  |                |

Deliverables for the configuration and customization phase as per KDOL requirements are:

**Table 14: Deliverables for configuration and customization**

| Task 5                   | Deliverable                               |
|--------------------------|---|
| Configure & Build System | <b>5A</b> - Configuration Management Plan |

## 4.6 Migrate Data

TCS will develop a detailed Data Migration plan that documents the activities and tasks that will be performed by TCS and KDOL. One of the key goals for the data migration is to determine the amount of historical data to migrate without losing the integrity of the application and meet compliance requirement. Migrating data that is not required for everyday operations can create multiple risks to the project. TCS will assist KDOL in determining the optimum data required to be migrated and thereby reduce the risk.

While understanding the legacy data is a key factor for the TCS migration team, understanding the target design and table structures is key for KDOL to make critical decisions with data conversion and migration. For that purpose, data dictionaries are critical and will be developed by both KDOL and TCS on their respective systems.

TCS will develop mapping documents between the source and target design to assist KDOL in understanding the relationship. The mapping document will also document master values used in the legacy system and their interpretation for accurate conversion. In specific to documents and images currently contained within the existing FileNet system, TCS and KDOL will assess the current FileNet environment and develop a plan of action for conversion activities. TCS has not contemplated effort to convert the existing image sets within this statement of work.

Data migration for the modernized KDOL solution will be done in 3 parts:

- **Extraction:** Data will be extracted from all legacy data files, database or any other source to flat files which will be placed on secured server. Extraction will be the State's responsibility, with TCS providing the specifications for the mapping of data elements,. After the files are placed on secured location, TCS will load the files into the conversion source database. The source database structure will imitate the extracted data layout. TCS will perform data profiling and cleansing on the loaded data. In this activity, data with invalid values and tables that fail the integrity test will be identified and cleansed after discussion with State. The KDOL team will perform data encryption for sensitive data before providing it to the TCS data migration team
- **Transformation:** In this stage, cleansed source data will be used and transformed in a manner the new application can operate. TCS will lead the transformation design supported by the KDOL team. The design will include the following:
  - Data migration strategy document – This document will contain all target tables and transformation logic for all table and column using source data.
  - Source to target mapping: This document will contain all source tables and columns, which will be marked as “mapped” in case those are migrated or “not mapped” in case those are not migrated or “used” in case those are transformed and used indirectly in migration.

- Once design is completed, data migration programs will be developed and executed in conversion target database which will be replica of target database. After data is populated in conversion target database unit testing and data validation will be performed to make sure migrated data is fit for the application.
- **Loading:** After data migration is completed and tested data will be loaded from conversion target database to system testing, user acceptance testing and then to production.

A separate database will be used to load the migrated data solely for the purpose of data migration verification and testing. Parallel testing and data comparison will be done using this database and the legacy system. Where applicable, screens from both KDOL UI modernized system and the legacy system will be compared for accuracy and validity.

**Table 15: ETVX for Migrate Data**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>• Data mapping documents</li> <li>• KDOL approved data validation scenario</li> <li>• KDOL approved data verification scenario</li> </ul> |                |
| Tasks          | • Prepare Data Migration Plan  | TCS            |
|                | • Prepare Data Mapping Document  | KDOL, TCS      |
|                | • Perform data extraction activity   | KDOL           |
|                | • Create data loading files in the TCS provided format for staging environment   | TCS, KDOL      |
|                | • Data loading programs to load KDOL provided source data in TCS format  | TCS            |
|                | • Perform data cleansing activity on the legacy data   | KDOL           |
|                | • Create data dictionary   | TCS            |
|                | • Perform data loading for a sub-set of data   | TCS            |
| Validation     | • Review of validation scripts   | KDOL           |
|                | • Review of data verification scripts  | KDOL           |
|                | • Approve Data Mapping Document  | KDOL           |
|                | • Approve Data Dictionary  | KDOL           |
|                | • Approve Data Migration Plan  | KDOL           |
| Exit Criteria  | <ul style="list-style-type: none"> <li>• Data loading programs</li> <li>• Data extraction programs</li> <li>• Data loading files</li> <li>• Approved Data Dictionary</li> </ul>  |                |

| Activity type | Activity   | Responsibility |
|---------------|--|----------------|
|               | <ul style="list-style-type: none"> <li>Approved Data Migration Plan</li> <li>Approved Data Mapping Document</li> </ul> |                |

Deliverables for the migrate data phase as per KDOL requirements are:

**Table 16: Deliverables for Migrate Data**

| Task 6       | Deliverable                           |
|--------------|---------------------------------------|
| Migrate Data | 6A - Data Conversion / Migration Plan |
|              | 6B - Data Dictionary                  |

## 4.7 Implement Interfaces

Interface requirements will be captured during the gap analysis of the respective benefits, appeals and tax modules. A detailed list of identified interfaces to be implemented will be finalized after discussion with KDOL.

TCS will create an integration management plan that covers all aspects of integration with external agencies starting with requirement, design, coordination, development & testing. TCS will maintain a master interface list that will have details about each external interface like agency name, nature of interface, agency contact person, protocol information, frequency, complexity and dates related to requirement gathering, design verification, unit testing, system testing and user acceptance testing. TCS will conduct a weekly status meeting and ensure that all relevant stakeholders are making progress as per the agreed schedule. Any deviation from the plan is analyzed weekly and escalated to management, if needed.

TCS will create an integration testing plan that has details about the approach for testing of external interfaces. Each external interface is treated as a user story and a test script is created by TCS and reviewed by KDOL to test these interfaces. All interfaces will be tested during the system testing phase and the user acceptance testing phase. Some of tasks below overlap and are covered under gap analysis. For relevance and comprehension, those tasks are repeated below.

**Table 17: ETVX for interfaces implementation**

| Activity type  | Activity   | Responsibility  |
|----------------|--|---|
| Entry Criteria | <ul style="list-style-type: none"> <li>Interface inventory</li> <li>Interface input / output specification</li> </ul>  |   |
| Tasks          | <ul style="list-style-type: none"> <li>Create Integrations Management Plan</li> <li>Identify external interfaces</li> <li>Create interface inventory document</li> <li>Review and approve interface inventory document</li> <li>Identify input / output formats</li> <li>Review and finalize input / output formats</li> <li>Develop internal and external interface programs</li> <li>Perform code-walkthrough of the developed interfaces</li> </ul> | <p>TCS, KDOL</p> <p>TCS, KDOL</p> <p>TCS</p> <p>KDOL</p> <p>TCS, KDOL</p> <p>KDOL</p> <p>TCS</p> <p>TCS</p> |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | • Close code-walkthrough comments   | TCS            |
|               | • Perform unit testing of developed programs  | TCS            |
|               | • Close unit testing defects  | TCS            |
|               | • Perform code quality coverage   | TCS            |
|               | • Update master interface inventory document  | TCS            |
|               | • Create interface testing plan with external agencies  | TCS, KDOL      |
| Validation    | • Master interface inventory – review and sign off  | KDOL, TCS      |
|               | • Approve Integrations Management Plan  |                |
|               | • Approve Interface testing plan  | KDOL           |
| Exit Criteria | <ul style="list-style-type: none"> <li>• Approved Integrations Management Plan</li> <li>• Signed off master interface inventory</li> <li>• Approved Interface testing plan</li> </ul> |                |

KDOL will ensure that all external agencies will implement and test changes as per the mutually agreed upon project plan / Integrations Management Plan for any interface requirements with the modernized UI platform.

Deliverables for the implement interfaces phase as per KDOL requirements are:

**Table 18: Deliverables for Implement Interfaces:**

| Task 7               | Deliverable                              |
|----------------------|--|
| Implement Interfaces | <b>7A</b> - Integrations Management Plan |
|                      | <b>7B</b> - Integrations Testing Plan    |

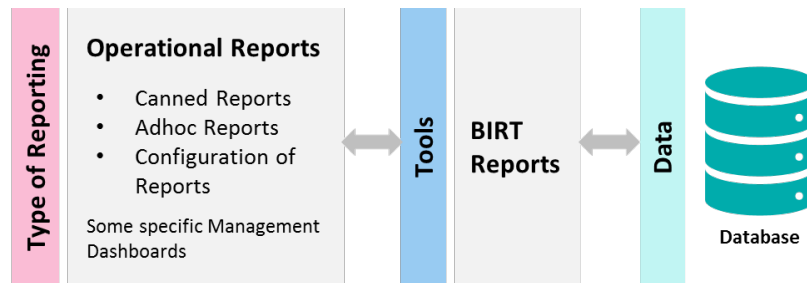
#### **4.8 Replace and Create Reports**

TCS will start discussing the reporting requirements from the Gap Analysis phase of the project and will work with KDOL to review the existing reports, helps in consolidation of reports, identification of new reporting requirements and then plan for the development and testing of the reports. TCS will maintain a consolidated report inventory that will list all the report requirements and necessary details to create a consolidated view of all reports for expedited development and tracking.

The TCS UI Solution allows online execution of reports as well as scheduling of reports and correspondence to be executed by batch programs. The main features of the reporting component of the UI Solution are:

- Reports can be easily designed and deployed using eclipse tool.
- Support for multiple data sources.
- Easy development of dashboards and other graphical reports.
- Easy-to-define report templates.
- Integration with the Document Management System (DMS).

- Report scheduling.



**Figure 7: Reports Architecture**

The TCS UI Solution has all the required reports built in as per the Federal and State requirements, and supports the delivery of reports electronically in the following three ways:

- **Scheduled Reports** – The vast majority of the reports will be scheduled to generate automatically by batch programs based on the business rules provided. The reports will be generated by the batch program and uploaded to the Document Management System (DMS). Each report will be configured as an XML (Extensible Markup Language) file and will be integrated with application security so that only users who have the appropriate roles attached to their user id can view these reports.
- **On Demand Reports** – Some reports are needed to be generated on an Ad hoc basis as per the demand of business users. For these reports, the user will be provided with a secure interface. The interface will accept the parameters required for generating the report from the user and then generate the report. The user will be able to save and print the report as per the requirement. This will allow Kansas users to perform queries on the data based on their chosen criteria and save the queries and results.
- All reports generated will be distributed in electronic format as per the KDOL's business requirements. The online reports and reports sent through email will be available for future reference in the document management system. Ad hoc reports can also be generated at any time and saved on the user's computer. The access to all reports (online, email, Ad hoc) is completely secure so that only individuals having access rights will be able to access those reports, thus, the TCS UI Solution reduces the dependency on paper reports. All the reports will be in the PDF format so that the users will be able to save the reports on their computer and print when required. These reports also support selective printing.
- **Email Reports** – These reports can also be configured to be sent through email as soon as they are generated. These reports will be available through the user email. The UI system facilitates sending reports as an attachment to the email or just sending the notification of the availability of the report in DMS.
- **Dashboards** - TCS will develop dashboards for performance management, statistical analysis and reporting, and federal compliance such as first payment time-lapse. TCS and KDOL will discuss the requirements and document as such as during the gap analysis phase.

**Table 19: ETVX for Replace and Create Reports**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>Reports and correspondence inventory from base solution</li> </ul>  |                |
| Tasks          | <ul style="list-style-type: none"> <li>Update reports inventory</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Update correspondence inventory</li> </ul>  |                |
|                | <ul style="list-style-type: none"> <li>Develop reports and correspondence design / template as per KDOL requirements identified during gap analysis</li> </ul> | TCS            |
|                | <ul style="list-style-type: none"> <li>Review and approve reports inventory document</li> </ul>  | KDOL           |
|                | <ul style="list-style-type: none"> <li>Review and finalize reports design / template</li> </ul>  | KDOL           |
|                | <ul style="list-style-type: none"> <li>Review and approve correspondence inventory document</li> </ul>   | KDOL           |
|                | <ul style="list-style-type: none"> <li>Review and finalize correspondence design / template</li> </ul>   | KDOL           |
| Validation     | <ul style="list-style-type: none"> <li>reports and correspondences inventory – Review and sign off</li> </ul>  | KDOL, TCS      |
| Exit Criteria  | <ul style="list-style-type: none"> <li>Signed off reports and correspondences inventory</li> </ul>   |                |

Deliverables for the replace and create reports as per KDOL requirements are:

**Table 20: Deliverables for Replace and create reports**

| Task 8                     | Deliverable  |
|----------------------------|--|
| Replace and Create Reports | <b>8A</b> - Inventory of all required business reports and correspondences |

#### **4.9 Organizational Change Management (OCM)**

TCS understands that the implementation of the system will significantly transform the work practices at the State in a standardized manner bringing scalable solutions across the KDOL.

One of the main challenges for KDOL will be to manage the apprehensions and anxiety among the stakeholder groups (employees, employers, and claimants) due to the implementation of the new UI system. This calls for proactive organizational change management to enable KDOL to successfully adapt to the new UI system for all UI functions. The following table highlights the key challenges faced by a state while implementing the system.

**Table 21: Key Implementation Challenges**

| OCM Guiding Principles | Key Challenges   |
|------------------------|--|
| Stakeholder Management | <ul style="list-style-type: none"> <li>Apprehensions among the stakeholder groups (employees in benefits and contributions, and employers) due to the implementation of new UI Modernization application software</li> <li>Obtaining a buy-in from all the impacted State user groups</li> <li>Lack of clear, concise, continuous, and targeted communication for the implementation program to the various stakeholders across the State</li> </ul> |

|                                |  |
|--------------------------------|--|
| Workforce Management           | <ul style="list-style-type: none"> <li>• Limited understanding of new roles and responsibilities</li> <li>• Successful adaption of the new UI Modernization application software with new processes, new system, etc.</li> <li>• Developing skills and competencies to be proficient in using the new improved business processes and UI Modernization functionality with the new system</li> <li>• Identifying risks like productivity throughput loss or innovation loss during transition from earlier system to new processes/system, and steps to mitigate them</li> <li>• Creation of rumour mills due to inconsistent communications</li> </ul> |
| Work Practice/Cultural Changes | <ul style="list-style-type: none"> <li>• Change in current work practices</li> <li>• Changes in business processes and procedures</li> </ul>   |

OCM will be the joint effort of KDOL and TCS. TCS will support KDOL in OCM for the following activities:

- Develop a detailed OCM Plan for the UI solution in collaboration with KDOL
- Prepare an organizational readiness assessment detailing KDOL's capacity for change and recommendations to guide the change program to realize expected outcomes
- Conduct change impact to staff and customers and identify skills gap.
- Assist in communication and preparing KDOL staff for transition to the new application especially with pre-implementation and go-live tasks. These activities will be defined in the Organizational Change Management Plan.

**Table 22: Activities for OCM**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>• Signed contract</li> <li>• Statement of work</li> </ul>   |                |
| Tasks          | <ul style="list-style-type: none"> <li>• Develop detailed OCM Plan.</li> <li>• Evaluate and reconfirm scope of OCM activities</li> <li>• Collect current job roles, job duties, and responsibilities across agency</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Conduct three visioning sessions with identified stakeholders to               <ul style="list-style-type: none"> <li>○ Collate current pain points/concerns/anxieties of KDOL staff related to new system</li> <li>○ Collate aspirations/goals of KDOL staff for new system</li> </ul> </li> </ul> | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>• Help KDOL senior staff define "case for change"</li> </ul>  | KDOL, TCS      |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>Prepare training plan</li> </ul>   | TCS, KDOL      |
|               | <ul style="list-style-type: none"> <li>Define groups to be trained for go-live (Claimants Self-Service, KDOL Business users, Employers)</li> </ul>                      | TCS, KDOL      |
|               | <ul style="list-style-type: none"> <li>Identify KDOL “Change Sponsors” who will form OCM Advisory Committee for remainder of program</li> </ul>                         | KDOL, TCS      |
|               | <ul style="list-style-type: none"> <li>Define communication plan with change sponsors</li> </ul>  | TCS, KDOL      |
| Validation    | <ul style="list-style-type: none"> <li>Review OCM Plan</li> <li>Review job duties and roles</li> <li>Review training plan</li> <li>Review communication plan</li> </ul> | KDOL, TCS      |
| Exit Criteria | <ul style="list-style-type: none"> <li>Sign-off – OCM Plan</li> <li>Sign off – training plan</li> <li>Sign off – communication plan</li> </ul>                          |                |

Deliverables for the OCM as per KDOL requirements are:

**Table 23: Deliverables for OCM**

| Task 9  | Deliverable                                       |
|---|---|
| Plan and Implement Organizational Change Management (OCM) | <b>9A</b> - Organizational Change Management Plan |

## 4.10 Testing

TCS will perform various test activities including unit, system, integration, accessibility, performance, and regression testing. Data migration testing will be addressed as part of the Testing phase. TCS will develop a comprehensive test plan documenting the methods and expectations of each testing phase. Exit criteria will be defined for each. The requirements matrix will be referenced through the testing phase and updated accordingly. Test scenarios and test cases will be developed to map to the functionality and process to be tested. The intent is to use automated test cases where possible. TCS and KDOL will confirm the automated testing approach.

TCS will assist KDOL with the user acceptance test planning and execution. More details on user acceptance testing are detailed in the below sections.

### 4.10.1 System Integration Testing (SIT)

The system integration testing scope includes testing the code changes resulting from gaps and the need for reconfiguration to achieve the expected functionality. Base functionality that is unchanged has a limited, mutually agreed upon regression test scope.

Test preparation involves creating test cases for each gap. The test cases will be linked to related user stories. Test cases will be created for all gaps linked to use cases, batches, correspondence, reports, interfaces, and workflows. Once the test cases are created, they will be linked to requirements and planned stories.

System integration testing will be performed for each functional module and across modules when necessary. Any result that does not meet the expected outcome from the system test will be logged as a defect.



Defects will be remediated and retested during this phase. The defects are linked to the test cases and the planning stories so that the defect impact can be determined. This will allow for setting priority and severity of the defect for proper resolution.

System integration testing may have dependencies on modules belonging to a future release in some cases. Alternative processes may be deployed to move forward with testing if that occurs. The alternative processes will be logged in the closure report. These occurrences will be communicated and discussed with KDOL in preparation for the user acceptance testing.

The ETVX for system integration testing will follow the standard activities as described for other processes.

**Table 24: ETVX for System Integration Testing**

| Activity type  | Activity  | Responsibility |
|----------------|---|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>Requirements matrix</li> <li>Gap Analysis Document</li> <li>System test plans and test cases</li> <li>Infrastructure setup for system test environment is ready</li> <li>Solution deployed to system test environment</li> </ul>                               |                |
| Tasks          | <ul style="list-style-type: none"> <li>Create automated regression testing scripts</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Link test cases with requirements</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Perform data load (migration)</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Verify data load</li> </ul>  | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Perform system testing with newly created data and migrated data as applicable.</li> </ul>   | TCS, KDOL      |
|                | <ul style="list-style-type: none"> <li>Perform system performance testing</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Perform system security and penetration testing</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Perform non-functional testing</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Close system testing defects</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Review and finalize iteration system test coverage</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Provide a functional walkthrough</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Update requirement traceability matrix</li> </ul>  | TCS            |
| Validation     | <ul style="list-style-type: none"> <li>System integration test results</li> <li>Performance test results</li> <li>System demo to KDOL and get feedback</li> <li>Validate and verify test cases with user stories, requirements in the Jira tool as part of requirement traceability matrix</li> </ul> | TCS, KDOL      |

| Activity type | Activity   | Responsibility |
|---------------|--|----------------|
| Exit Criteria | <ul style="list-style-type: none"> <li>System integration testing defects closed as per the SIT signoff criteria</li> <li>Updated Requirement traceability matrix</li> </ul> |                |

#### 4.10.2 User Acceptance Testing (UAT)

User acceptance testing (UAT) is the opportunity for KDOL business users to test the system in a UAT environment to determine that the solution meets the needs of KDOL and is compliant with the approved requirements. After completion of SIT for each release, user acceptance testing will be performed by UAT users, using test cases identified from system testing and as defined by KDOL. The data for UAT will be created by UAT users with assistance from TCS team.

KDOL is overall responsible for the UAT activity. KDOL will prepare an Acceptance Test Plan, and TCS will support KDOL by performing activities that will facilitate a successful completion. These activities will include developing procedures to facilitate the UAT process, which will include defined entry, exit and acceptance criteria. The procedures will include methods for documenting and communicating test results to TCS and other stakeholders. The KDOL team will perform acceptance testing together with participation and support of the TCS team. KDOL will plan and report on acceptance testing to demonstrate that all requirements are met. TCS will support the UAT phase by performing the necessary activities for a successful UAT completion.

The ETVX for user acceptance testing will follow the standard activities as described for other processes.

**Table 25: ETVX for User Acceptance Testing**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>UAT test plan</li> <li>Requirements Matrix</li> <li>Gap Analysis Document Infrastructure setup for UAT environment is ready</li> <li>Solution implementation (deployed to UAT environment)</li> </ul> |                |
| Tasks          | <ul style="list-style-type: none"> <li>Verify that the environment is operational and ensure smooth testing with the proper data set with the proper access provided to business users</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Establish UAT user accounts to resemble accounts of the actual users.</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Link system UAT test cases with requirements</li> </ul>   | KDOL           |
|                | <ul style="list-style-type: none"> <li>Perform data load (migration)</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Verify data load</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Provide a functional walkthrough</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Prepare UAT test data</li> </ul>  | KDOL           |
|                | <ul style="list-style-type: none"> <li>Perform UAT using newly created and migrated data</li> </ul>  | KDOL           |

| Activity type | Activity   | Responsibility |
|---------------|--|----------------|
|               | <ul style="list-style-type: none"> <li>Fix UAT defects</li> </ul>  | TCS            |
|               | <ul style="list-style-type: none"> <li>Prepare UAT test coverage report</li> </ul>   | KDOL, TCS      |
|               | <ul style="list-style-type: none"> <li>Update requirements matrix</li> </ul>   | TCS            |
|               | <ul style="list-style-type: none"> <li>Provide regular updates to the business team on progress, defect management support and reporting</li> </ul>            | TCS, KDOL      |
|               | <ul style="list-style-type: none"> <li>Prepare Quality and Test Management Plan</li> </ul>   | TCS            |
|               | <ul style="list-style-type: none"> <li>Prepare Performance Test Plan</li> </ul>  | TCS            |
|               | <ul style="list-style-type: none"> <li>Perform Requirements to Test Case Mapping</li> </ul>  | TCS            |
|               | <ul style="list-style-type: none"> <li>Prepare Third-Party Test Plans</li> </ul>   | TCS            |
| Validation    | <ul style="list-style-type: none"> <li>UAT test results</li> <li>UAT-signoff as per the signoff criteria</li> </ul>  | KDOL           |
| Exit Criteria | <ul style="list-style-type: none"> <li>All critical defects are closed.</li> <li>A plan for closure of remaining system testing defects is created.</li> </ul> |                |

#### **4.10.3 Regression Testing**

To ensure an application still functions as expected after major code changes, updates, or improvements on the system. Regression testing is necessary for the overall stability and functionality of the existing features. Regression scenarios are identified from the scenario inventory sheet by KDOL and TCS.

#### **4.10.4 Performance testing**

Performance testing is to evaluate the system load on the application server. TCS will perform the load test using the tool LoadRunner. LoadRunner is used to test applications, measuring system behavior and performance under load. LoadRunner can simulate thousands of users concurrently using application software, recording, and later analyzing the performance of key components of the application. TCS expects to conduct performance tests for up to 1,200 users. KDOL will provide the necessary license for the tool,

#### **4.10.5 Security Testing**

Security testing involves the testing of software to identify any flaws and gaps from a security and vulnerability point of view. TCS will use the HCL AppScan (Formerly IBM AppScan) software for security testing. It will scan the source code to increase visibility and better understanding of enterprise risks. KDOL will provide the necessary license for the tool.

#### **4.10.6 Accessibility Testing**

The objective of the accessibility testing is to ensure the application is “Americans with Disability Act” (ADA) compliant and is suitable for the visually impaired user. TCS will conduct accessibility testing using screen readers for all standards as identified. The standards are 508 compliance and web standards and collect test results for selected screens. Testing can also be conducted by a team of visually impaired resources that KDOL can provide.

While TCS and KDOL will continue to share responsibility for deliverables, user acceptance deliverables have a crucial element that will be the responsibility of KDOL. KDOL will be responsible for providing user acceptance test cases for the process. This is a final validation that all processes have been covered in the design, configuration and customization phases and a final opportunity for KDOL to ensure there are no major deviations from the approved requirements.

Deliverables for the Testing as per KDOL requirements are:

**Table 26: Deliverables for Testing**

| Task 10               | Deliverable                                    |
|-----------------------|--|
| Conduct SystemTesting | <b>10A</b> - Quality and Test Management Plan  |
|                       | <b>10B</b> - Performance Test Plan             |
|                       | <b>10C</b> - Requirements to Test Case Mapping |
|                       | <b>10D</b> - Third-Party Test Plans            |

#### **4.11 Training**

TCS will provide training for the UI system that will cover functional as well as technical areas. TCS will provide training management and administration for the initial and ongoing knowledge transfer process to allow for the most efficient use, familiarity, application, and comprehension of all aspects of the components and processes.

TCS also recognizes that training needs to be aligned with the program implementation methodology. TCS will utilize the “Train the Trainer” model by first identifying a core group of KDOL business users who would be trained during different stages of the program life cycle based on the training schedule. The application user manual will be used to facilitate the training.

“Trainer the Trainer” training will be conducted in KDOL facilities. 8-10 key, KDOL identified members from each functional area will attend the training. The training will be conducted in a classroom setting with computers based to be most effective. These trainers will further take classroom and hands-on sessions for the end business user community and champion users in their respective departments.

**Training Schedule:** The training schedule will be defined in the Master Training Plan. Training delivery schedule will be planned such that it would allow adequate timing between UAT and Go-Live. This will ensure that the UI Trainers are prepared for end user training delivery.

**Training Materials:** TCS will provide training materials including a training manual, webinar, guides, and training courses. The TCS team will utilize base product documentation and training materials which will be customized for the KDOL. In addition to the training manual, FAQ (Frequently Asked Questions) sheets, desk guides, and other system aids will be developed for the KDOL. Training materials will be shared by TCS for train the trainer program. Training will be provided remotely through WebEx/Microsoft Teams or at KDOL office, based on need and as required by the KDOL.

**Web-Based Training (WBT):** TCS will create WBT courses using Adobe Captivate software. This software allows training team to insert videos, system demonstrations and simulations, course assessments, and fully responsive eLearning content into a readily accessible training course for all users.

**Training Evaluation:** During training, participants will be expected to demonstrate mastery of training content through various reinforcing activities, knowledge checks, and written post-training assessments. Each of these assessment tools will be closely reviewed and used to continually improve training quality. TCS will develop, monitor, and execute, with approval from the KDOL, a training evaluation survey to all participants of the training provided and allow for user feedback.

**Training Environment:** TCS will maintain a training environment dedicated to the development and delivery of training, separate from our solution that mimics the solution. This environment will contain test data with fictional persons and scenarios. Users will be given access the learning environment from any computer or device they have network access on and can use the training facility/room (when not in use for a scheduled training) to practice in the training environment.

**Table 27: ETVX for Training**

| Activity type  | Activity  | Responsibility |
|----------------|---|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>Training environment readiness</li> <li>Data requirements in the training environment is met</li> </ul>                |                |
| Tasks          | <ul style="list-style-type: none"> <li>Publish a training curriculum for the train-the-trainer program</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Provide user manuals for training including glossary of terms</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Conduct the train-the-trainer training for identified key resources of KDOL</li> </ul>                                 | TCS            |
|                | <ul style="list-style-type: none"> <li>Record attendance of the train-the-trainer training program</li> </ul>   | TCS            |
|                | <ul style="list-style-type: none"> <li>Publish a training curriculum for the end users training program</li> </ul>  | KS             |
|                | <ul style="list-style-type: none"> <li>Conduct the end user training</li> </ul>   | KS             |
|                | <ul style="list-style-type: none"> <li>Record attendance of the end users training program</li> </ul>   | KS             |
| Validation     | <ul style="list-style-type: none"> <li>Training Plan</li> <li>User Manuals – Review and Sign Off</li> <li>Training materials – Review and sign off</li> </ul> |                |
| Exit Criteria  | <ul style="list-style-type: none"> <li>Approved Training Plan</li> <li>Signed off – User Manuals</li> <li>Signed off - Training materials</li> </ul>          |                |

Deliverables for the Training as per KDOL requirements are:

**Table 28: Deliverables for Training**

| Task 11                     | Deliverable                                 |
|-----------------------------|---|
| Create and Conduct Training | <b>11A</b> - Training Plan                  |
|                             | <b>11B</b> - Training Courses and Documents |
|                             | <b>11C</b> - Glossary of Terms              |

KDOL will be responsible for participant registration, attendance, and end user training sessions. TCS will be conducting train the trainer sessions.

#### **4.12 Go-live**

A detailed system implementation plan will be created to outline the approach for various categories of transition from the legacy system to the modernized system. The system implementation plan allows both TCS and KDOL to prepare and get ready for the transition. The scope of this plan includes:

- Identify activities for switching off the legacy systems

- Identify activities for deploying the system in the production environment
- Define processes for supporting the system

TCS will create an implementation plan to identify and track all activities that are required for the implementation of the UI system including multiple mock or dry-run Go Live exercises to ensure a successful final Go Live. This implementation plan will have the approach and strategy for implementation along with 3 appendices that will have:

- **Appendix A: Go Live Checklist** – This checklist will have all the tasks that are must for the Go Live of the system. TCS keeps on updating this checklist based and start tracking this checklist at least 3 months prior to Go Live and do a weekly meeting to ensure that all stakeholders are completing their tasks as per the due date defined for each task.
- **Appendix B: Go Live Plan** – This appendix will list down the tasks that needs to be performed on Go Live day for the modernized system including data conversion with latest source files, tasks that needs to happen in the legacy system, any communication that needs to go to the claimants, employers, or external agencies etc. All steps in this Go Live Plan gets executed during mock-ups that we do before the actual Go Live and will help us in frictionless movement from legacy system to modernized system.
- **Appendix C: Backup & monitoring plan** – This appendix has the detailed plan around all the backups that needs to happen for the servers, database and production environment. This appendix also captures different aspects of the servers, database and network that we need to monitor in production environment.

**Table 29: Go-Live Activities**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>• User acceptance testing is completed</li> <li>• User training on new system is completed</li> <li>• OCM activities completed</li> <li>• Non-functional testing completed</li> </ul>   |                |
| Tasks          | <ul style="list-style-type: none"> <li>• Pre-Implementation Activities: Identify and document pre-implementation activities or tasks that need to complete before the Implementation Day. These activities will be classified under the following categories               <ul style="list-style-type: none"> <li>○ Application Readiness</li> <li>○ Communication to internal and external users</li> <li>○ Testing</li> <li>○ Data Migration</li> <li>○ End-User Training</li> <li>○ Handling of Transition Scenarios</li> <li>○ Dry runs</li> </ul> </li> </ul> | TCS, KDOL      |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | <ul style="list-style-type: none"> <li>○ Support Model setup</li> <li>○ Verification or Checklist to mark off each pre implementation task is completed</li> </ul>  |                |
|               | <ul style="list-style-type: none"> <li>• Implementation Activities: The time measured list of interdependent tasks that need to be performed on the start of Implementation cycle. This includes tasks like sending communication for legacy shutdown to open of the application URL to the public after successful go-live.</li> </ul> | TCS, KDOL      |
|               | <ul style="list-style-type: none"> <li>• Post-Implementation Activities: This includes firstly the verification activities to ensure the critical system processes are working without glitches. Secondly the transition task to handle business scenarios or migrated data that requires user action in the system.</li> </ul>         | TCS, KDOL      |
|               | <ul style="list-style-type: none"> <li>• Rollback Activities: This includes list of activities to be performed in case of rollback to legacy system is required.</li> </ul>   | TCS, KDOL      |
| Validation    | <ul style="list-style-type: none"> <li>• System is accessible to various group of users</li> <li>• Data migration is successful with any rejections approved</li> <li>• All required internal staff account is created and required access is provided.</li> </ul>  | KDOL           |
| Exit Criteria | <ul style="list-style-type: none"> <li>• Successful go-live as per acceptance criteria.</li> </ul>  |                |

Deliverables for the Go-live phase as per KDOL requirements are:

**Table 30: Deliverables for Go-live phase**

| Task 12                           | Deliverable               |
|-----------------------------------|---------------------------|
| Deployment Planning and Execution | 12A - Implementation Plan |
|                                   | 12B - Go Live Check List  |

#### 4.13 Warranty Support

As part of warranty support, TCS will address pending defects reported prior to go-live which are mutually agreed upon and those reported during warranty period will be addressed as part of warranty support. A defect closure plan will be defined and prioritized for warranty phase exit.

Defects categorized as out-of-scope, or any requested enhancements to the system are considered out-of-scope during the warranty period unless a change request is made. The following activities will be performed during the warranty support phase:

**Table 31: Warranty Support Activities**

| #  | Activities  | Responsibility |
|----|---|----------------|
| 1. | Provide fix for defects.  | TCS            |
| 2. | Update requirement artifacts against defect fixes, if required. | TCS            |

|    |   |      |
|----|---|------|
| 3. | Update user and operations manual, and training material against defect fixes, if required. | TCS  |
| 4. | Update design document for defect fixes, if required.                                       | TCS  |
| 5. | Update test scripts for defect fixes, if required.  | TCS  |
| 6. | Facilitate user acceptance testing of fixed defects.  | KDOL |
| 7. | Cleanse source data to fix legacy data related defects if any.                              | KDOL |

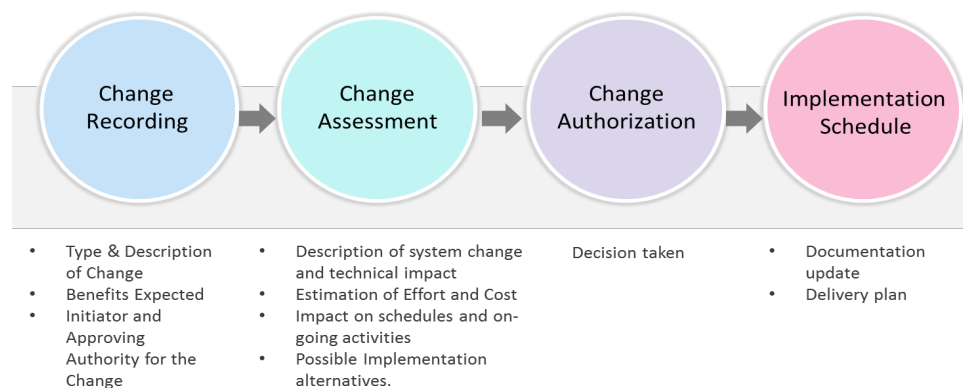
#### 4.14 Maintenance and Operations

TCS will be responsible for maintaining the application during the operations and maintenance period. TCS will create a Maintenance and Operations process in consultation with KDOL that will have the process for - defect logging & resolution, defect prevention & causal analysis, change requests, monitoring performance measures, and escalation mechanism.

TCS will prepare Maintenance and operations status report and shared with KDOL on a regular interval during this phase.

Major activities during maintenance and operations phase include:

- **Request Logging and Tracking:** The TCS support team will manage the deficiencies reported, enhancements and modifications requested by the KDOL.
- **Applications Upgrade:** Deploying regulatory and compliance updates, application upgrades and enhancements including updated versions of patches for the environments, updated third-party software such as Operating System (OS), Database software, Application software, Web Server software, Middle Tier software and other ancillary software, and applications. State and federal regulatory changes are handled through the change control process.
- **Application Maintenance:** TCS recommends implementing the Agile methodology for the KDOL platform's maintenance, support, and enhancement process. This will ensure frequent software delivery with a series of iterations called sprints. The KDOL can determine the length of these sprints based on their priority.
- **Change Management Process:** A uniform mechanism of reporting, control and implementation of change requests will be followed during this phase. KDOL and TCS will agree on a procedure at the commencement of the maintenance phase, including authorization of a Change Control Board to address all the change requests. The figure below represents this process.



**Figure 8: Change Control Process**

The following activities will be performed during the Maintenance and operations phase:



**Table 32: Maintenance and Operations Activities**

| #  | Activities   | Responsibility |
|----|--|----------------|
| 1. | Provide fix for defects.   | TCS            |
| 2. | Update requirement artifacts against defect fixes, if required.      | TCS            |
| 3. | Update user and operations manual against defect fixes, if required. | TCS            |
| 4. | Update design document for defect fixes, if required.                | TCS            |
| 5. | Update test scripts for defect fixes, if required.                   | TCS            |
| 6. | Facilitate user acceptance testing of fixed defects.                 | KDOL           |

TCS will follow below metrics for RTO and RPO after discussion with KDOL:

| Metric                         | Acceptable Level of Performance | Measurement Description  |
|--------------------------------|---------------------------------|--|
| Recovery Point Objective (RPO) | 15 minutes.                     | Period of time in which an enterprise's operations must be restored following a disruptive event   |
| Recovery Time Objective (RTO)  | 8 hours.                        | Period of time and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity. |

Deliverables for the maintenance and operations phase as per KDOL requirements are:

**Table 33: Deliverables for maintenance and operations phase**

| Task 13                         | Deliverable   |
|---------------------------------|---|
| Maintenance and Operations Plan | <b>13A</b> – Maintenance and Operations Status Report |

Level 1 support for production incidents will be handled by KDOL business users.

Maintenance and Operations support will cover any production incidents due to defect in the system. Any enhancements to the system will be addressed as per the change request process. Following section defines Service Level Agreements (SLAs) during the maintenance and operations phase for modernized UI system.

**Production Environment**

| # | Deficiency | Definition   | Resolution                        |
|---|------------|--|-----------------------------------|
| 1 | Critical   | System is not accessible by any internal or external user                        | ≤ 2 hours of reporting deficiency |
| 2 | Moderate   | Portion of system is not accessible by any internal or external user             | ≤ 8 hours of reporting deficiency |
| 3 | Minor      | Prevents internal users from accessing system between 5:00 am – 11:59 pm Central | ≤ 8 hours of reporting deficiency |

**Training**

| # | Deficiency | Definition   | Resolution                                  |
|---|------------|--|---|
| 1 | Critical   | Training system is not accessible during training phase / activities                     | ≤ 4 business hours of reporting deficiency  |
| 2 | Moderate   | Portion of the system is not accessible during training phase / activities               | ≤ 24 business hours of reporting deficiency |
| 3 | Minor      | Portion of the system is not accessible to some users during training phase / activities | ≤ 72 business hours of reporting deficiency |

**Test (UAT) Environment**

| # | Deficiency | Definition  | Resolution                                  |
|---|------------|---|---|
| 1 | Critical   | UAT system is not accessible during testing phase                                       | ≤ 8 business hours of reporting deficiency  |
| 2 | Moderate   | Portion of the system is not accessible during testing phase / activities               | ≤ 24 business hours of reporting deficiency |
| 3 | Minor      | Portion of the system is not accessible to some users during testing phase / activities | ≤ 72 business hours of reporting deficiency |

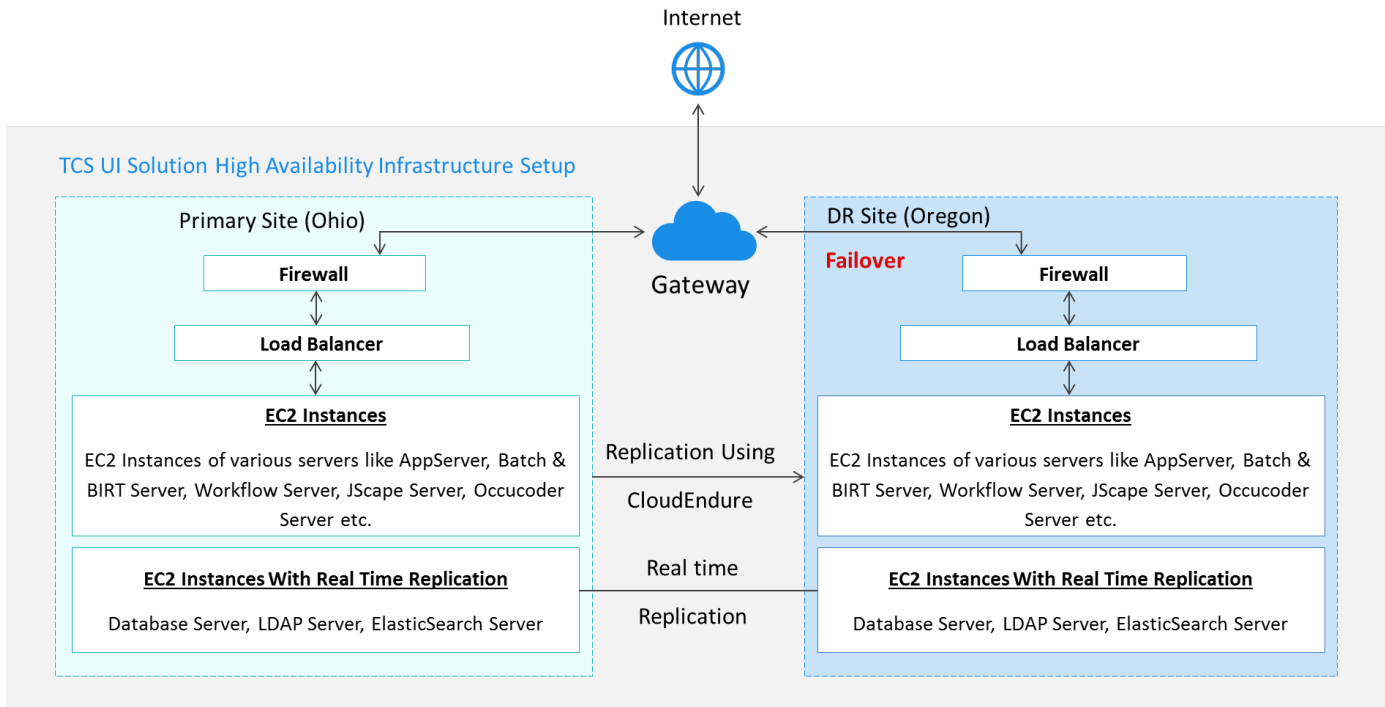
In case any metrics being deficient, TCS will create a correction plan, review it with KDOL and implement the corrective actions.

**4.15 Business Continuity & Security Plan**

TCS will provide a business continuity & security plan detailing roles & responsibilities, infrastructure components, operational documents inventory, partial and complete disaster event definition, notification procedures, recovery criteria definition, recovery process checklist and event monitoring.

The entire infrastructure of TCS UI solution on the DR site will be replicated, minimizing the impact due to disaster. When an outage occurs at the AWS primary site for KDOL, the primary site will fail over to the DR site and the application will be available. When the primary location is recovered, we will fall back to it from the DR site. Following figure illustrates the disaster recovery environment setup.

During the production environment setup, TCS will setup DR site and processes as defined in BCP. TCS will also execute full DR drill following all procedure defined in BCP manual. The DR drill results, and monitoring report will be submitted to state for review and approval as per the requirements listed in RFP.



**Figure 9: TCS UI Solution High Availability Infrastructure Setup**

Deliverables for the business continuity as per KDOL requirements are:

**Table 34: Deliverables for business continuity & security plan**

| Task 14   | Deliverable                    |
|---|--------------------------------|
| Maintain Effective Cyber Security and Business Continuity | 14A - Business Continuity Plan |
|   | 14B - Security Plan            |
|   | 14C- Incident Response Plan    |

#### 4.16 End of Contract Services

TCS will work and prepare documentation for knowledge transition including transition plan, lessons learned and program acceptance document.

**Table 35: ETVX for End of Contract Services**

| Activity type  | Activity   | Responsibility |
|----------------|--|----------------|
| Entry Criteria | <ul style="list-style-type: none"> <li>State decides to take over the operations and support activities.</li> </ul>  |                |
| Tasks          | <ul style="list-style-type: none"> <li>Prepare transition plan</li> <li>Validate documentation is current</li> </ul> | TCS            |
|                | <ul style="list-style-type: none"> <li>Prepare lessons learned</li> </ul>  | TCS            |
|                | <ul style="list-style-type: none"> <li>Update Standard Operating Procedure (SOP) for support</li> </ul>              | TCS            |

| Activity type | Activity  | Responsibility |
|---------------|---|----------------|
|               | activities  |                |
|               | <ul style="list-style-type: none"> <li>Update user manuals</li> </ul>   | TCS & KDOL     |
|               | <ul style="list-style-type: none"> <li>Prepare program acceptance document</li> </ul>   | KDOL           |
| Validation    | <ul style="list-style-type: none"> <li>Transition Plan – Review and Sign Off</li> <li>Lessons learned – Review and Sign Off</li> <li>Program acceptance document – Review and sign off</li> </ul> |                |
| Exit Criteria | <ul style="list-style-type: none"> <li>Approved Transition plan</li> <li>Approved Lessons Learned</li> <li>Approved program acceptance document</li> </ul>  |                |

Deliverables for end of contract Services as per KDOL requirements are:

**Table 36: Deliverables for end of contract Services**

| Task 15                  | Deliverable                              |
|--------------------------|--|
| End of Contract Services | <b>15A</b> - Transition Plan             |
|                          | <b>15B</b> - Program Acceptance Document |
|                          | <b>15C</b> - Lessons Learned             |

## 5 **Project Logistics**

This program will be executed from 2 named locations. These locations are listed below:

- KDOL State Office, 1309 SW Topeka Blvd. Topeka, KS
- TCS Development Centre, Cincinnati, OH (Onshore)

If required for any reason, TCS associates will be allowed to work remotely with mutual agreement between KDOL and TCS

Each location will have a mixed set of roles based on the activities to be performed from each location.

The following are the proposed key roles that will be available at below locations:

- **KDOL State Office** – Project Manager, Lead System Architect, Lead Data Architect, Integration and reporting project Manager, Lead business Analysts, Lead Developers, Lead testers.
- **TCS Development Center, Cincinnati, OH** – Application Developers, business analysts, testers, etc., This location is identified to have the flexibility to ramp up and down as needed and also to position knowledgeable associates for CR implementation for post implementation support.

TCS will provide KDOL with a list of acceptable laptop devices and the workspace environment specified by job function, including the number required. KDOL will furnish these devices for on-site staff, and will provide licenses to Microsoft product (MS Word, PowerPoint, Excel, Project Plan, Visio) for computers issued to TCS staff and TCS subcontractors

Additionally, KDOL will provide:

- Network, phone, and internet access to TCS onsite resources in the KDOL facilities and the necessary equipment such as printers and consumables, meeting rooms etc. for the execution of this project.
- Remote access to the infrastructure and KDOL network for the modernization of the UI project.

### 5.1 **TCS Program Team**

TCS program team will be distributed at the following locations during the implementation of the system.

**Table 37: Project Locations and Head Count**

| #  | Location  |
|----|---|
| 1. | KDOL State Office, 1309 SW Topeka Blvd. Topeka KS |
| 2. | TCS Development Center, Cincinnati, OH - Onshore  |

The TCS team based out of KDOL location will work within office premises or from home from 8 AM – 5 PM CST with 1 hour of lunch break in between. This timeframe falls within the normal working hours for the KDOL team.

TCS team may be required to work beyond regular office hours and over the weekends depending upon the amount of work to be accomplished and coordinate with the team at other locations working in a different time zone. TCS team physically located at KDOL will remotely access the KDOL network and/or KDOL network to work beyond regular office hours.

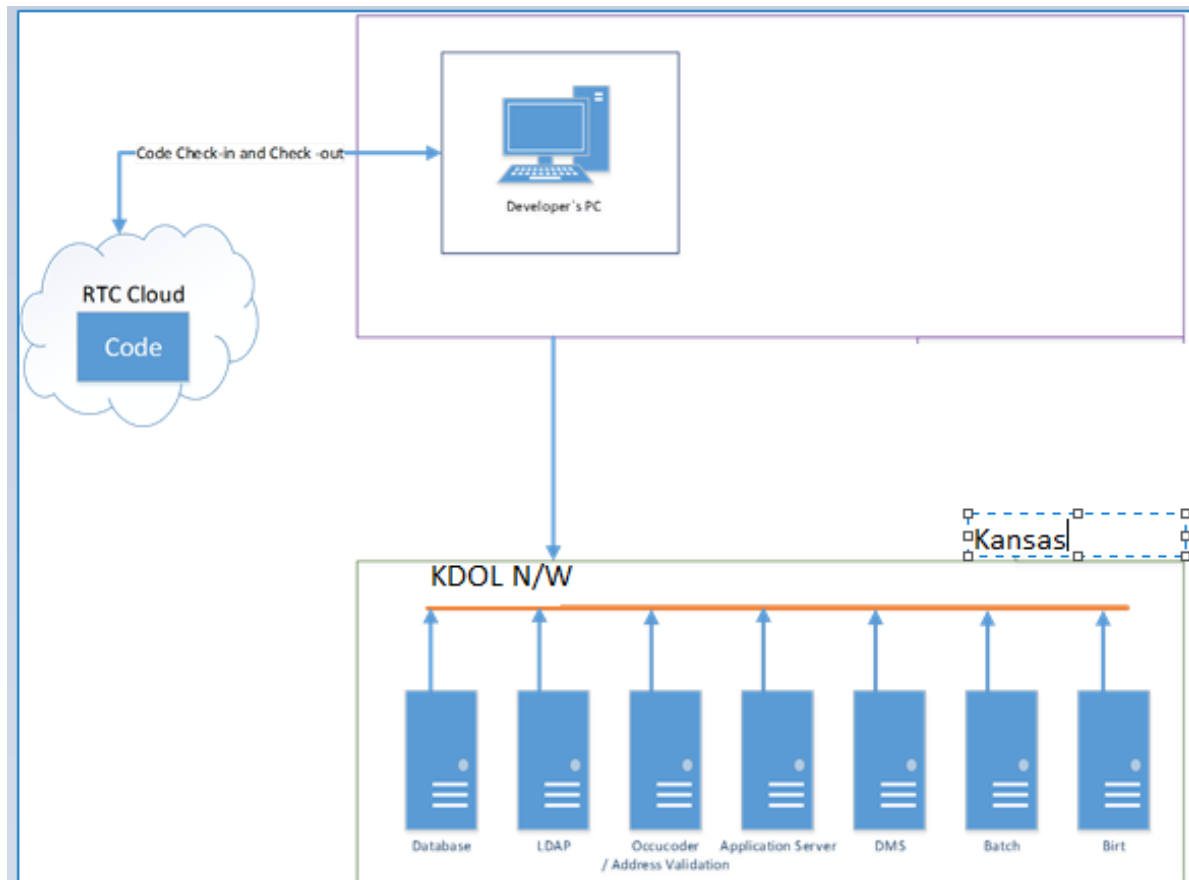
Several TCS team roles are designated as key resources for the KDOL program. These roles are Project Manager, Lead System Architect, Lead Data Architect, Integration and reporting project Manager and Lead business Analysts. In the event TCS is planning the release of a key resource, they will communicate in writing and seek approval from the KDOL Project Management Team for the release with a minimum of 30 calendar days in advance of the release date. In the event the release is unplanned (resignation, health/family issue, work authorization status, etc.), TCS will

provide as much written notice as possible in advance of the release date. Whether planned or unplanned, a resource with comparable skill, experience level and knowledge will be assigned to the program and be put through an on-boarding plan that ensures a smooth transition and minimizes disruption to the schedule. Additionally, TCS will ensure continuity of development team resources assigned to the program throughout the life of each system rollout.

TCS will ensure the availability and timely access/involvement of these resources for the KDOL program.

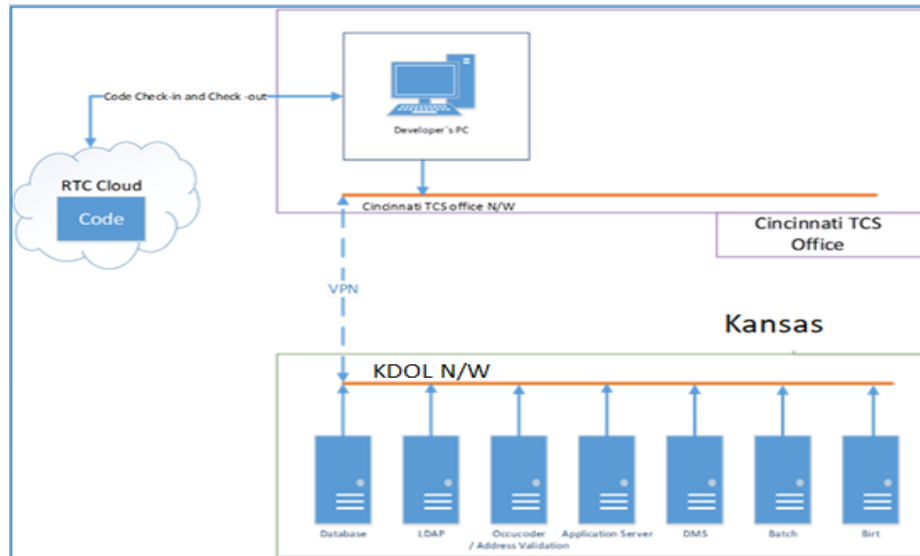
## 5.2 Work Environment

Individuals working from KDOL State Office will be connected to KDOL network. The The work environment set-up for the individuals working from KDOL State office is depicted in the diagrams below.



**Figure 10: Work Environment Set-Up at KDOL State Office**

Individuals working from TCS Development Center will be connected to KDOL network securely via state VPN. The The work environment set-up for the individuals working from TCS Development Center is depicted in the diagrams below. KDOL plans a point-to-point VPN between KDOL and TCS. The parameters for this PTP VPN will need reviewed by the agency and ISO prior to implementation.



**Figure 11: Work Environment Set-Up at TCS Development Center, Cincinnati, OH**

Program execution will require different environments for a smooth and successful implementation. These environments are listed in the table below:

**Table 38: System Environment and Hosting Location**

| System Environment          | Hosting Location |
|-----------------------------|------------------|
| Development                 | AWS Cloud        |
| System Testing              | AWS Cloud        |
| User Acceptance Testing     | AWS Cloud        |
| GAP                         | AWS Cloud        |
| Data Migration Verification | AWS Cloud        |
| Production & DR             | AWS Cloud        |

The following sub sections detail the various hardware and software required for different environments used for the system implementation.

### 5.2.1 Development Environment

This is the environment where TCS would perform unit testing the individual components developed. Development environment is hosted at the AWS Cloud. The table below lists software components which will be available in the Development Environment for KDOL and the software components needed by the developer on their desktop for development activities.

**Table 39: Software for Development Environment**

| #                        | Software                              | Licensed (Y/N) | Description   | Version No. |
|--------------------------|---------------------------------------|----------------|---|-------------|
| <b>Development Tools</b> |                                       |                |   |             |
| 1.                       | JBoss Enterprise Application Platform | Y              | Application Server for the system to host Benefits and Tax applications | 7           |
| 2.                       | JDK                                   | N              | Java Development Kit for application development                        | 8           |

| #                               | Software                               | Licensed (Y/N) | Description   | Version No.        |
|---------------------------------|--|----------------|---|--------------------|
| 3.                              | Eclipse IDE Neon (And Plugins)         | N              | Integrated Development environment for the developers   | Latest             |
| 4.                              | Notepad++                              | N              | Editor for viewing logs or large files  | Latest             |
| 5.                              | Postman                                | N              | Testing tool to test Web Services   | Latest             |
| 6.                              | Kdiff                                  | N              | Utility to compare 2 files or folders   | 0.9.95             |
| 7.                              | Squirrel SQL Client                    | N              | Client Utility to connect and query Database  | 3.5.0              |
| 8.                              | Bitwise SSH Client                     | N              | Software to connect to remote Linux servers   | 7.14 or Latest     |
| 9.                              | 7 Zip                                  | N              | Utility to Zip/Unzip files  | 4.65 or Latest     |
| 10.                             | SOAP UI                                | N              | Testing tool to test Web Services   | Latest             |
| <b>Web Browsers</b>             |  |                |   |                    |
| 11.                             | Mozilla Firefox                        | N              | Browser   | Latest             |
| 12.                             | Google Chrome                          | N              | Browser   | Latest             |
| 13.                             | Internet Explorer (Edge)               | N              | Browser   | Latest             |
| <b>Microsoft Products</b>       |  |                |   |                    |
| 14.                             | Microsoft Office                       | Y              | Office products (Word, PowerPoint, Excel, Outlook, MS Teams and OneNote) for the program work                           | Latest             |
| 15.                             | Microsoft Project                      | Y              | Software to work on Project plan for key personnel  | Latest             |
| 16.                             | Microsoft Visio                        | Y              | Software for creating and viewing Data Link Diagrams for key personnel, business analysts and designers.                | Latest             |
| <b>Other Essential Software</b> |  |                |   |                    |
| 17.                             | RedHat Active Directory Server Console | Y              | Client Console to connect to Active Directory Server of the ACCESS application  | 1.1.7              |
| 18.                             | Embarcadero                            | Y              | Tool to Create, Edit and View DB Design   | 9.6.1              |
| 19.                             | JAWS                                   | Y              | Desktop tool for performing ADA compliance testing  | 15                 |
| 20.                             | GitHub                                 | Y              | Source Code Repository  | Latest             |
| 21.                             | Adobe Acrobat Reader                   | N              | PDF Reader  | Latest             |
| 22.                             | MicroFocus Loadrunner                  | Y              | Loadrunner tool will be used for application performance testing. This tool will be used in non-production environment. | Latest or Latest-1 |
| 23.                             | IBM DataStage client                   | Y              | Client tool to create and execute Data Migration Jobs   | 9.1                |
| 24.                             | AWS DevOPS and ServiceNow              | Y              | Application Lifecycle Management Tool   | Latest or Latest-1 |



| #   | Software                                  | Licensed (Y/N) | Description   | Version No.        |
|-----|---|----------------|---|--------------------|
| 25. | IBM DB2 UDB Database                      | Y              | Database server   | 10.5               |
| 26. | StoneBranch Scheduler                     | Y              | Batch scheduling library  | Latest or Latest-1 |
| 27  | Elastic Search Document Management System | N              | DMS Server to capture PDF copies of correspondences and reports | Latest or Latest-1 |
| 28  | JBoss Drools Red Hat Decision Manager     | Y              | Workflow Server for Work item creation and assignment           | 7                  |
| 29  | HCL AppScan                               | Y              | Application Security Testing                                    | 10                 |
| 30  | SonarQube                                 | N              | Code Quality and Code Security                                  | 8                  |
| 31  | Selenium                                  | N              | Automated Functional Testing tool                               | Latest             |

### 5.2.2 System Testing Environment

This is the environment where TCS would perform various testing for the application. ST environment is hosted at the AWS Cloud. The table below lists software components which will be available in the System Test Environment for KDOL.

**Table 40: Software for ST Environment**

| #              | Software                                     | Licensed (Y/N) | Description   | Version No.        |
|----------------|--|----------------|---|--------------------|
| <b>Servers</b> |  |                |   |                    |
| 1.             | JBoss Enterprise Application Platform        | Y              | Application Server for the system to host Benefits and Tax applications | 7                  |
| 2.             | AWS RDB                                      | Y              | Database Server   | 10.5               |
| 3.             | RedHat JBoss Directory Server                | Y              | Active Directory Server of the ACCESS application                       | 8.2                |
| 4.             | BIRT Server                                  | N              | Reporting Server  | 4.2                |
| 5.             | Elastic Search Document Management System    | N              | DMS Server to capture PDF copies of correspondences and reports         | Latest             |
| 6.             | Stonebranch Scheduler                        | Y              | Batch scheduling library  | Latest or Latest-1 |
| 7.             | <b>JBoss</b> Drools Red Hat Decision Manager | Y              | Workflow Server for Work item creation and assignment                   | 7                  |
| 8.             | UI Path                                      | Y              | Automation Tool   | Latest             |

| #  | Software   | Licensed (Y/N) | Description                | Version No. |
|----|------------|----------------|----------------------------|-------------|
| 9. | AWS DevOPS | Y              | Deployment Management Tool | Latest      |

### 5.2.3 UAT Environment

The environment would be used for User Acceptance Testing and Training activities. UAT environment is hosted at the AWS Cloud. The following table lists software components which will be available in the User Acceptance Test Environment for KDOL:

**Table 41: Software for UAT Environment**

| #              | Software                                     | Licensed (Y/N) | Description  | Version No.        |
|----------------|--|----------------|--|--------------------|
| <b>Servers</b> |  |                |  |                    |
| 1.             | JBoss Enterprise Application Platform        | Y              | Application Server for the system to host benefitsand Tax applications | 7                  |
| 2.             | AWS RDB                                      | Y              | Database Server  | Latest             |
| 3.             | RedHat JBoss Directory Server                | Y              | Active Directory Server of the ACCESS application                      | 8.2                |
| 4.             | BIRT Server                                  | N              | Reporting Server   | 4.2                |
| 5.             | Elastic Search Document Management System    | N              | DMS Server to capture PDF copies of correspondences and reports        | Latest             |
| 6.             | <b>JBoss</b> Drools Red Hat Decision Manager | Y              | Workflow Server for Work item creation and assignment                  | 7                  |
| 7.             | Stonebranch                                  | Y              | Batch scheduling library   | Latest or Latest-1 |
| 8.             | UI Path                                      | Y              | Automation Tool  | Latest             |
| 9.             | AWS DevOPS                                   | Y              | Deployment Management Tool   | Latest or Latest-1 |

### 5.2.4 Gap/Training Environment

A separate environment during GAP phase will be created and will used reused during training phase also. This would contain a bare minimum list of software needed to perform Gap analysis. Gap environment is hosted at the AWS Cloud.

The following table lists software components which will be available in the Gap/Training Environment for KDOL.

**Table 42: Software for Gap/Training Environment**

| #              | Software                                     | Licensed (Y/N) | Description   | Version No.        |
|----------------|--|----------------|---|--------------------|
| <b>Servers</b> |  |                |   |                    |
| 1.             | JBoss Enterprise Application Platform        | Y              | Application Server for the system to host benefits and Tax applications | 7                  |
| 2.             | IBM DB2 UDB Database or AWS RDB              | Y              | Database Server   | 10.5 (Latest)      |
| 3.             | RedHat JBoss Directory Server                | Y              | Active Directory Server of the ACCESS application                       | 8.2                |
| 4.             | Stonebranch scheduler                        | Y              | Batch Server for scheduling and execution of batch processes            | Latest or Latest-1 |
| 5.             | <b>JBoss</b> Drools Red Hat Decision Manager | Y              | Workflow Server for Work item creation and assignment                   | 7                  |

### 5.2.5 Data Migration Verification Environment

A separate environment for the Data Migration (DM) verification activities will be created. This would contain a bare minimum list of software needed to perform DM verification. DM Verification environment is hosted at the AWS Cloud.

The following table lists software components which will be available in the Training Environment for KDOL.

**Table 43: Software for DM Verification Environment**

| #              | Software                                     | Licensed (Y/N) | Description   | Version No.        |
|----------------|--|----------------|---|--------------------|
| <b>Servers</b> |  |                |   |                    |
| 1.             | JBoss Enterprise Application Platform        | Y              | Application Server for the system to host benefits and Tax applications | 7                  |
| 2.             | AWS RDB                                      | Y              | Database Server   | 10.5               |
| 3.             | RedHat JBoss Directory Server                | Y              | Active Directory Server of the ACCESS application                       | 8.2                |
| 4.             | Stonebranch scheduler                        | Y              | Batch Server for scheduling and execution of batch processes            | Latest or Latest-1 |
| 5.             | <b>JBoss</b> Drools Red Hat Decision Manager | Y              | Workflow Server for Work item creation and assignment                   | 7                  |

### 5.2.6 Production & DR Environment

Production & DR environment will be hosted on the Cloud environment. The server space and licenses would need to be procured by the KDOL. The environment sizing information will be calculated based on Capacity planning for KDOL.

The following table lists software components which will be available in the Production & DR Environment for KDOL:

**Table 44: Software for Production Environment**

| #              | Software                                      | Licensed (Y/N) | Description  | Version No.        |
|----------------|---|----------------|--|--------------------|
| <b>Servers</b> |   |                |  |                    |
| 1.             | JBoss Enterprise Application Platform         | Y              | Application Server for the system to host benefits, IVR and Tax applications | 7                  |
| 2.             | AWS RDB                                       | Y              | Database Server  | Latest             |
| 3.             | RedHat JBoss Directory Server                 | Y              | Active Directory Server of the ACCESS application                            | 8.2                |
| 4.             | BIRT Server                                   | N              | Reporting Server   | 4.2                |
| 5.             | Elastic Search Document Management System     | N              | DMS Server to capture PDF copies of correspondences and reports              | Latest or Latest-1 |
| 6.             | <b>JBoss</b> Drools Red Hat Decision Manager  | Y              | Workflow Server for Work item creation and assignment                        | 7                  |
| 7.             | Stonebranch scheduler                         | Y              | Batch scheduling library   | Latest or Latest-1 |
| 8.             | JSCAPE MFT Server                             | Y              | FTP server for File Upload functionality                                     | 8.8                |
| 9.             | Connect Direct                                | Y              | For FTI Data Movement  | 4.6                |
| 10.            | Vormetric Data Security Manager               | Y              | For FIPS 140-2 compliant encryption of Data at Rest                          | Latest             |
| 11.            | IBM Infosphere Guardium Data Activity Monitor | Y              | For DB level protection of sensitive data including FTI                      | 9.0                |
| 12.            | IBM Infosphere Guardium Data Encryption       | Y              | For DB level protection of sensitive data including FTI                      | 9.0                |
| 13.            | Fortigate IPS                                 | Y              | Intrusion Prevention System for Blocking Data packets from blocked IP ranges | Latest             |
| 14.            | Clumio Backup                                 | Y              | Backup solution for Cloud  | Latest             |
| 15.            | IBM Data Server Manager                       | Y              | Monitoring software for DB Performance                                       | 2.1.4              |
| 16.            | UI Path                                       | Y              | Automation Tool  | Latest             |
| 17.            | UrbanCode Server & Agent Licenses             | Y              | Deployment Management Tool   | Latest             |

| #   | Software    | Licensed (Y/N) | Description  | Version No. |
|-----|-------------|----------------|--|-------------|
| 18. | Splunk      | Y              | SIEM Tool  | Latest      |
| 19. | IBM Cognos  | Y              | BI Tool  | Latest      |
| 20. | Clear2There | Y              | Hearings recording tool  | Latest      |
| 21. | CloudWatch  | Y              | AWS Monitoring Tool  | Latest      |
| 22. | CloudEndure | Y              | Business continuity software for disaster recovery & continuous backup | Latest      |

### 5.3 **Hardware and Software Requirements**

#### 5.3.1 **Responsibility of KDOL**

The following are the responsibility of KDOL for Hardware and Software requirements:

- Provide licenses for software components and the Operating System subscription licenses for Non-Production environment
- Provide licenses for software components and the Operating System subscription licenses for Production environment
- Provide licenses for all the tools listed in this SOW
- Continue to provide software tools and productions for KDOLdevelopment like:
  - HCL AppScan
  - Microfocus LoadRunner
  - JAWS
  - Embarcadero
- Procure and provision resources in cloud for KDOLproduction environment
- TCS will require access to the KDOL AWS cloud account(s) for various environments. The system generates email communication to the external and internal users for various business processes. To generate these emails, the system needs to utilize the state's mail server. KDOL needs to provide connectivity to the State's Mail server.
- Acquire a domain name(s) (e.g. www.ksui.gov) to access the application from internet.
- Provide Stratum 2 Network Time Protocol (NTP) Source to sync the clock of each server. NTP source is needed to configure Vormetric Appliance for KDOL environment.

## **6 Value Add Capabilities**

TCS will implement following value add solution for KDOL.

### **6.1 Robotic Process Automation (RPA):**

TCS will implement four use cases for RPA using UiPath.

- Identity document verification - SSN card Driving license card verification
- Filing workshare weekly certifications
- Mask SSN – Complete following activities for claimants who faced identity theft and UI claim was filed on behalf of them. 1) Create Fraud Overpayment 2) Cancel Claim and Existing Overpayments 3) Mask SSN
- Resolve work items for discrepancy in wages and names
  - Name mismatch
  - Missing wages

One time implementation services cost is included in TCS scope for the above use case. KDOL will provide the requisite UiPath licenses to TCS for implementation and support of the above-mentioned use cases.

### **6.2 Chatbot:**

TCS will implement chatbot solution for external customers to help them with their queries. Following are the use cases for chatbot implementation

- Status of claim filed
- Status of benefits payment
- Status of appeal filed

One time implementation services cost is included in TCS scope for the above use cases. KDOL will provide the requisite Kore.ai licenses to TCS for implementation and support of the above-mentioned use cases.

## 7 Payment milestones

This section provides the financial details for the project. Fees are broken up between system implementation, and operations and maintenance. Overall, the TCS fees of services for the eighty-one (81) month period of performances is \$40,911,031, which is inclusive of implementation services, system warranty, and forty-three (43) months of maintenance and operations services. All prices are quoted in US dollars, and are not inclusive of any hardware, software, or infrastructure cost. TCS expects that KDOL will directly purchase those items per the agreed upon bill of materials. All prices are quoted in USD, excluding any applicable taxes, levies, duties, and charges.

### 7.1 System Implementation Payment Milestones

TCS proposes the following milestones for the system implementation. The dates noted in the Milestone Date column are estimated and may change when the detailed project schedule is developed during the project planning phase for each rollout. These milestones for implementation services are based on the single implementation rollout with 12 months months of post-production warranty. 10% holdback (retainage) from each payment in implementation period is deducted and 2 separate milestones for retainage are added at the end.

|    |                         |   |    |           |
|----|-------------------------|---|----|-----------|
| 1  | Initiation & Planning   | Program Governance Plan                                     | M1 | \$148,733 |
| 2  | Initiation & Planning   | Resource Management Plan                                    | M1 | \$148,733 |
| 3  | Initiation & Planning   | Risk and Issue Management Plan                              | M1 | \$148,733 |
| 4  | Initiation & Planning   | Change Management Plan                                      | M2 | \$140,600 |
| 5  | Initiation & Planning   | Configuration Management Plan                               | M2 | \$140,600 |
| 6  | Initiation & Planning   | Incident Response Plan                                      | M2 | \$140,600 |
| 7  | Initiation & Planning   | Integrations Management Plan                                | M2 | \$140,600 |
| 8  | Initiation & Planning   | Organizational Change Management (OCM) Plan                 | M2 | \$140,600 |
| 9  | Gap Analysis (Benefits) | Finalization of Requirements - Iteration 1                  | M3 | \$338,658 |
| 30 | Gap Analysis (Tax)      | Finalization of Requirements - Iteration 1                  | M3 | \$338,658 |
| 10 | Gap Analysis (Benefits) | Finalization of Requirements - Iteration 2                  | M5 | \$338,658 |
| 12 | Design (Benefits)       | Completion of Data Migration Mapping Document - Iteration 1 | M5 | \$223,099 |
| 31 | Gap Analysis (Tax)      | Finalization of Requirements - Iteration 2                  | M5 | \$338,658 |
| 33 | Design (Tax)            | Completion of Data Migration Mapping Document - Iteration 1 | M5 | \$223,099 |
| 13 | Design (Benefits)       | Completion of Application Design Artifacts - Iteration 1    | M6 | \$672,495 |
| 34 | Design (Tax)            | Completion of Application Design Artifacts - Iteration 1    | M6 | \$672,495 |
| 11 | Gap Analysis (Benefits) | Finalization of Requirements - Iteration 3                  | M7 | \$323,408 |
| 16 | Design (Benefits)       | Completion of Data Migration Mapping Document - Iteration 2 | M7 | \$207,849 |
| 32 | Gap Analysis            | Finalization of Requirements -                              | M7 | \$323,408 |

|    |                           |   |     |             |
|----|---------------------------|---|-----|-------------|
|    | (Tax)                     | Iteration 3   |     |             |
| 37 | Design (Tax)              | Completion of Data Migration Mapping Document - Iteration 2 | M7  | \$207,849   |
| 17 | Design (Benefits)         | Completion of Application Design Artifacts - Iteration 2    | M8  | \$657,245   |
| 20 | Design (Benefits)         | Completion of Data Migration Mapping Document - Iteration 3 | M8  | \$207,849   |
| 38 | Design (Tax)              | Completion of Application Design Artifacts - Iteration 2    | M8  | \$657,245   |
| 41 | Design (Tax)              | Completion of Data Migration Mapping Document - Iteration 3 | M8  | \$207,849   |
| 21 | Design (Benefits)         | Completion of Application Design Artifacts - Iteration 3    | M9  | \$544,097   |
| 42 | Design (Tax)              | Completion of Application Design Artifacts - Iteration 3    | M9  | \$544,097   |
| 14 | Development (Benefits)    | Completion of Data Migration Development - Iteration 1      | M10 | \$320,998   |
| 35 | Development (Tax)         | Completion of Data Migration Development - Iteration 1      | M10 | \$320,998   |
| 15 | Development (Benefits)    | Completion of Application Development - Iteration 1         | M11 | \$1,183,991 |
| 36 | Development (Tax)         | Completion of Application Development - Iteration 1         | M11 | \$1,183,991 |
| 18 | Development (Benefits)    | Completion of Data Migration Development - Iteration 2      | M13 | \$192,599   |
| 39 | Development (Tax)         | Completion of Data Migration Development - Iteration 2      | M13 | \$192,599   |
| 19 | Development (Benefits)    | Completion of Application Development - Iteration 2         | M14 | \$1,133,991 |
| 40 | Development (Tax)         | Completion of Application Development - Iteration 2         | M14 | \$1,133,991 |
| 22 | Development (Benefits)    | Completion of Data Migration Development - Iteration 3      | M16 | \$192,599   |
| 24 | System Testing - Benefits | Completion of Data Migration System Testing - Iteration 1   | M16 | \$203,399   |
| 43 | Development (Tax)         | Completion of Data Migration Development - Iteration 3      | M16 | \$192,599   |
| 45 | System Testing - Tax      | Completion of Data Migration System Testing - Iteration 1   | M16 | \$203,399   |
| 23 | Development (Benefits)    | Completion of Application Development - Iteration 3         | M17 | \$955,592   |
| 25 | System Testing - Benefits | Completion of Application System Testing - Iteration 1      | M17 | \$716,995   |
| 44 | Development (Tax)         | Completion of Application Development - Iteration 3         | M17 | \$955,592   |
| 46 | System Testing - Tax      | Completion of Application System Testing - Iteration 1      | M17 | \$716,995   |
| 26 | System Testing - Benefits | Completion of Data Migration System Testing - Iteration 2   | M18 | \$203,399   |
| 47 | System Testing - Tax      | Completion of Data Migration System Testing - Iteration 2   | M18 | \$203,399   |
| 27 | System Testing - Benefits | Completion of Application System Testing - Iteration 2      | M19 | \$588,597   |
| 48 | System Testing - Tax      | Completion of Application System Testing - Iteration 2      | M19 | \$588,597   |
| 28 | System Testing - Benefits | Completion of Data Migration System Testing - Iteration 3   | M20 | \$203,399   |



|    |                            |   |     |             |
|----|----------------------------|---|-----|-------------|
| 49 | System Testing - Tax       | Completion of Data Migration System Testing - Iteration 3 | M20 | \$203,399   |
| 53 | Implementation and Go Live | Implementation Plan                                       | M20 | \$128,399   |
| 54 | Implementation and Go Live | Training Plan   | M20 | \$128,399   |
| 29 | System Testing - Benefits  | Completion of Application System Testing - Iteration 3    | M21 | \$588,597   |
| 50 | System Testing - Tax       | Completion of Application System Testing - Iteration 3    | M21 | \$588,597   |
| 55 | Implementation and Go Live | Performance Test Plan                                     | M21 | \$128,399   |
| 51 | User Acceptance Testing    | Completion of UAT   | M23 | \$2,054,386 |
| 56 | Implementation and Go Live | Preparation of Go Live - OCM                              | M23 | \$385,197   |
| 52 | End to End Testing         | Completion of End to End Testing                          | M24 | \$770,395   |
| 57 | Implementation and Go Live | Completion of Training - Train the Trainer                | M24 | \$513,597   |
| 58 | Implementation and Go Live | Completion of Performance and Security Testing            | M24 | \$256,798   |
| 59 | Implementation and Go Live | System Go-Live  | M26 | \$719,023   |
| 60 | At Go Live                 | First Release of Retainage Amount                         | M26 | \$1,457,158 |
| 61 | Post Go Live               | Second Release of Retainage Amount                        | M29 | \$1,457,158 |

## **7.2 Maintenance and Operations Payment Milestones**

After completion of the implementation period TCS proposes a 22 month maintenance and operations phase.

- For the first ten (10) months of the maintenance period, a monthly fee of \$298,587 will be invoiced.
- For the following thirty-three (33) months of the maintenance period, a monthly fee of \$266,122 will be invoiced.

## **7.3 Optional Renewal Pricing**

For the optional 48-month renewal periods, the fees will be subject to mutually agreed upon pricing, not to exceed a 10% increase (for each renewal period) from the contracted maintenance amount for a similar scope of work..