Statement of Work

Statement of Work for the State of Connecticut
HIX/IE –Tier I Project

September 25, 2012
Version 9.25

Statement of Work for the State of Connecticut HIX/IE –Tier I Project

This Statement of Work ("SOW"), effective as of 10/1/12 ("SOW Effective Date"), confirms that Deloitte Consulting LLP ("Contractor" or "Deloitte Consulting") shall provide the services set forth herein (the "Services") for the State of Connecticut ("State"") Health Insurance Exchange and Integrated Eligibility-Tier I Project as defined herein ("Project"). This SOW is subject to the terms and conditions of that certain Information Processing Systems Agreement by and between Deloitte Consulting and the State approved by the Connecticut Office of the Attorney General on October 10, 2011 ("Agreement"). For purposes of this SOW, the term "SOW" or "Statement of Work" as used in the Agreement means this SOW and is separate and distinct from the definition contained in (2.z) of the Agreement.

Capitalized terms not specifically defined in this SOW shall have the same meaning as in the Agreement.

1. Background of the Project and Definitions

The Contractor shall provide the Services as described herein to the State.

For purposes of this SOW, the term "System" shall mean the State of Connecticut Health Insurance Exchange/Integrated Eligibility ("CT HIX/IE") system as described herein and is separate and distinct from the System as defined in 2.aa) of the Agreement. The Deliverable and other requirements contained herein are specifically associated with this CT HIX/IE System. .

This SOW contains the following Exhibits:

Exhibit A Performance Criteria

Exhibit A includes Appendices F, G and H

Exhibit B Project Implementation Schedule

2. Project Scope

2.1 SOW Purpose

The purpose of this SOW is to authorize the Services described herein and to document the schedule and resources Deloitte Consulting shall provide for the Project to support the implementation of the CT HIX/IE.

2.2 Scope of Services

Contractor shall provide the Deliverables described in Exhibit B. The requirements for the Deliverables are contained in Appendix F, G and H.

The scope of the SOW shall include the CT HIX/IE System functionality required to achieve compliance with the Affordable Care Act ("ACA"), and delivered through Releases described below and set forth in Exhibit A. Currently two releases are included; (for the purposes of this SOW "Software Releases", shall mean the releases contained herein).

1. Release 1 includes the Plan Management subsystem of the HIX. The planned go-live is June 2013, and shall provide for lead time for QHPs to be certified in the HIX prior to open enrollment.

2. Release 2 planned go-live is October 1, 2013. This release complies with the ACA and supports Commercial, Advanced Premium Tax Credit, Cost Sharing Reduction and MAGI-based Medicaid health insurance eligibility determination, purchasing and enrollment as further described in Exhibit A and B.

In the event the parties mutually agree to modify the releases contained herein, a written change order shall be issued.

2.3 Hardware and Software

Exhibit A contains a preliminary listing of Software and Hardware requirements for the Project. Within the first three (3) weeks of this SOW, the State and the Contractor shall finalize the quantities of Hardware and Software to purchase. Deloitte Consulting shall rely on the State to purchase the Hardware and Software for the Project in accordance with a project schedule ("Project Schedule") that contains the required dates for delivery and installation of such Hardware and Software. By mutual written agreement, the State may purchase the Software and Hardware under the terms of the Supplement to the Agreement effective as of March 15, 2012 , as requested by the State.

2.4 Deliverable Maintenance and Support

The scope of this SOW does not currently provide any maintenance or support for Release 1 and Release 2 of the HIX/IE system.

3. Release Schedule and Key Dates

The release schedule and key dates are contained in Exhibit A.

4. Resource Confirmation

4.1 Deloitte Consulting

The resource commitments are contained in Exhibit A.

4.2 Decision Authority

4.2.1 The State of Connecticut contact that will have decision authority under this SOW is:

1. Project Executive: Jim Wadleigh

4.2.2 The Deloitte Consulting contact that will have decision authority under this SOW is:

1. Lead Engagement Director: Nagen Suriya

5. Fees

The State of Connecticut shall pay the amounts contained in Exhibit B Project Implementation Schedule to the Contractor in accordance with the terms of the Agreement.

6. Change Orders

Change Orders to this SOW shall be submitted and processed in accordance with the terms of the Agreement, and will utilize the format established for Change Orders under the Agreement.

7. General Project Assumptions

The General Project Assumptions are contained in Exhibit A to this SOW.

8. Responsibilities

The Responsibilities for the Project are contained in Exhibit A.

9. Limitation of Liability

[redacted]

10. Notices

The respective contact names for any notices required under this SOW are as follows:

State of Connecticut

Contact name: Jim Wadleigh

Address: 280 Trumbull Street

Hartford, Ct

Phone: 860-418-6255

Email: james.wadleigh@ct.gov

Deloitte Consulting LLP

Contact name: Nagen Suriya

Address: 2500 One PPG Place

Pittsburgh, PA 15222

Phone: 412-402-5265

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Exhibit A
PERFORMANCE CRITERIA

EXHIBIT B
PROJECT IMPLEMENTATION SCHEDULE

Exhibit A
Performance Criteria

The following definitions apply to Appendix F and Appendix G (column "Fit Gap of Proposed Soln").

Fit Gap of Proposed Solution	Definition
Out of the Box	The requirement is met by an OOTB solution without any changes.
Configuration	The requirement will necessitate changes to properties or settings of the product (files, parameters, data, etc.) to satisfy requirements without any code or scripting changes to the product. A system administrator or super user should be able to make the configuration.
Extension	The requirement will necessitate changes to the product that require code or scripting or definition (such as adding of attributes to a database or interface). Any customization or custom extension required is considered an extension.
Not Provided	The requirement is not provided as part of the proposed solution.

APPENDIX F – FUNCTIONAL REQUIREMENTS

Level	#	Business Requirement	Requirement Description	[redacted]
1	F1	Plan Certification	The system shall support assessment of the actuarial value, benefit design, and quality of plans, to facilitate certification and quality rating.	

Level	#	Business Requirement	Requirement Description
2	F1.1	Manage plan Submission Process	
3	F1.1.1		The system shall provide the means for issuers to load plans and required content into the Exchange. These means shall include direct data entry via an administrative tool, a real-time or batch interface or a common formatted file.
3	F1.1.2		The system shall provide the capability to use standardized forms for rate submissions based on Exchange decision or issued federal guidelines.
2	F1.2	Certify / Recertify / Decertify Plan	
3	F1.2.1		The system shall provide the functionality to notify Issuers, CMS, Connecticut Insurance Department (CID), and enrollees of QHP non-renewal, decertification, and recertification.
3	F1.2.2		The system shall provide the ability to remove and/or deactivate a decertified plan from the Exchange.
3	F1.2.3		The system shall provide the ability to distinguish plans and issuers certified for the Exchange from those that have applied but were denied, those that have expired or decertified.
3	F1.2.4		The system shall provide the ability to enter and store reasons for acceptance or denial of a plan or issuer into the Exchange. E.g. inability of the issuer to perform electronic transactions that adhere to HIX system requirements
3	F1.2.5		The system shall record the plan non-renewal event and status information, including date and reason/rationale.
2	F1.3	Form QHP Agreement with Issuer	

Level	#	Business Requirement	Requirement Description
3	F1.3.1		The system shall provide the capability to develop, update, and send qualified health plan agreement.
3	F1.3.2		The system shall provide the functionality to validate against CID data (website or provided information) to ensure that issuer application and plan data are approved where necessary.
3	F1.3.3		The system shall provide the functionality to generate QHP certification agreements to be sent to issuers.
3	F1.3.4		The system shall provide the functionality to receive notice of acceptance or non-acceptance of certification agreements from issuers.
3	F1.3.5		The system shall allow storage of issuer agreement signature or acceptance date to indicate the issuer agreement acceptance.
2	F1.4	Manage Issuer and Plan Information	
3	F1.4.1		The system shall provide ability to create, update, and/or analyze issuer and plan information. This applies to initial creation and subsequent updates to information.
3	F1.4.2		The system shall provide the functionality to create accounts for issuers, providing them with HIX issuer ID(s). This provides access to the system for issuers to review issuer, plan, rates, and benefits data.
3	F1.4.3		The system shall provide the functionality to collect and display for each QHP issuer information including but not limited to: claims payment policies and practices, financial disclosures, enrollment data, disenrollment data, number of claims denied, rating practices, information on cost sharing and payments with respect to any out-of-network coverage, and information on enrollee rights under Title I of the ACA.
3	F1.4.4		The system shall provide the administrative tools so that issuers can update their provider networks to ensure the Exchange contains accurate information. The historical provider data shall be saved to provide

Level	#	Business Requirement	Requirement Description
			accurate historical representation of the provider network at a given point in time.
3	F1.4.5		The system shall provide the administrative tools so that issuers can update their marketing material stored in the Exchange content management system.
3	F1.4.6		The system shall provide the functionality to validate against CID data (website or provided information) and other resources to ensure that issuer application meets Exchange criteria (including but not limited to network adequacy, transparency and quality information, compliance, marketing standards, accreditation status, and additional QHP certification standards).
3	F1.4.7		The system shall provide the functionality to perform automated data checks for completion and appropriateness when issuers submit rates and benefits data.
3	F1.4.8		The system shall provide ability for Exchange staff to view plan information, update as needed and add additional data to support plan evaluation.
3	F1.4.9		The system shall save historical issuer data.
2	F1.5	Process Change in Plan Enrollment Availability	
3	F1.5.1		The system shall process plan availability when a plan either closes or re-opens enrollment during a plan year.
3	F1.5.2		The system shall provide the ability to hide and unhide plans from consumer view/access according to QHP enrollment availability.
3	F1.5.3		The system shall track all changes to plan availability and pertinent statistics and information associated with the plan.
3	F1.5.4		The system shall notify CMS and CID of change in QHP enrollment availability (open/closed).

Level	#	Business Requirement	Requirement Description
3	F1.5.5		The system shall notify registered Navigators/Brokers indicating the plan enrollment status in the case of an approval of the enrollment change request.
2	F1.6	Manage Rates and Benefits	
3	F1.6.1		The system shall provide the capability to assist in review of rate increase justifications.
3	F1.6.2		The system shall provide the functionality to track the status and progress of a QHP plan rate review.
3	F1.6.3		The system shall provide the functionality to revise rates and benefits data submission.
3	F1.6.4		The system shall provide the functionality to notify enrollees of QHP rate changes.
3	F1.6.5		The system shall provide the capability to preload rate tables submitted by issuers in the format approved by Exchange and publish rate tables once they are approved by Exchange.
3	F1.6.6		The system shall provide the functionality to perform automated data checks for completion and appropriateness when issuers submit rates and benefits data. This could also include any rate time constraints/expiration rules.
3	F1.6.7		The system shall provide the capability to use a standard form for rate submissions based on Exchange decision or federal guidelines.
2	F1.7	Monitor Plan Compliance	
3	F1.7.1		The system shall evaluate certification compliance information from different sources and notify issuer of this information.
3	F1.7.2		The system shall provide the functionality to receive, track, and forward to regulatory organizations individually identifiable complaints.

Level	#	Business Requirement	Requirement Description
3	F1.7.3		The system shall provide the functionality to document any resolution to individually identifiable complaints.
3	F1.7.4		The system shall provide the functionality to receive complaint data from issuers and other organizations. Complaint data shall be organized so that it can be tracked by source, plan product, issuer and type of complaint.
3	F1.7.5		The system shall utilize all complaint data to identify and report complaint/feedback trends and potential compliance issues for QHP and/or Issuers.
3	F1.7.6		The system shall provide the functionality for enrollees to obtain feedback and/or information on referral to other organizations for their complaint.
3	F1.7.7		The system shall provide the functionality for a two way communication between the Exchange and issuers regarding compliance issues and required responses.
3	F1.7.8		The system shall provide the functionality to decertify an issuer or QHP, should they fail to be compliant with Exchange criteria.
3	F1.7.9		The system shall provide the functionality to report complaints to authorized entities based on the frequency and criteria established by the Exchange.
3	F1.7.10		The system shall produce electronic and paper notices for issuers indicating the results of the compliance and quality reviews, i.e. the compliance and quality rating determination.
2	F1.8	Plan Quality Rating	
3	F1.8.1		The system shall assign quality ratings to QHPs offered through the Exchange based on a determined set of criteria.
3	F1.8.2		The system shall provide the capability to provide electronic data on QHP to CID in the CID specified format to facilitate ratings and information sharing.
3	F1.8.3		The system shall provide the functionality to update QHP plan quality ratings and track historical ratings and time periods for these ratings (begin and end dates).

Level	#	Business Requirement	Requirement Description
3	F1.8.4		The system shall allow the quality rating methodology to be modified to incorporate different quality indicators, weighting, and methods.
3	F1.8.5		The system shall provide the functionality to assign an initial quality rating to a Qualified Health plan (QHP).
3	F1.8.6		The system shall provide the capability to collect and store quality measures and to compute plan quality ratings as per CMS methodology on a periodic basis.
3	F1.8.7		The system shall provide the capability to provide electronic data on ratings of QHP to CMS in the CMS-specified format.
3	F1.8.8		The system shall provide the functionality to utilize data from multiple sources such as accrediting bodies (National Committee for Quality Assurance (NCQA), Healthcare Effectiveness Data and Information Set (HEDIS), the Consumer Assessment of Healthcare Providers and Systems (CAHPS), URAC - Utilization Review Accreditation Commission, and Centers for Medicare & Medicaid Services (CMS) Administrative Data) and State regulators (CID) for determining quality indicators and methods used in plan quality rating.
2	F1.9	Risk Management	
3	F1.9.1		The system shall provide the capability to calculate the actuarial risks associated with insurance premiums.
3	F1.9.2		The system shall provide the capability to submit uniform summaries of coverage by health plans for consumers (enrollees and applicants).
1	F2	**Financial Management**	The system shall provide the capability to enable payment processing, facilitate premium invoice generation, application of payments, returned checks, and refund processing, track and apply tax credits to member accounts, collect and aggregate premiums and collect or offsets user fees, monitor payment status, and resolve payment/invoice discrepancies identified by Individual, and/or Issuers.

Level	#	Business Requirement	Requirement Description
2	F2.1	Capture Payment Information	
3	F2.1.1		The system shall invoice individual enrollees monthly for premiums due, with instructions to send payments to a designated payment processing center/address.
3	F2.1.2		The system shall provide the functionality to receive individual premium payments via credit card, debit card, ACH, Vendor POS device, cash and checks.
3	F2.1.3		The invoice should include the monthly balance due and any outstanding premium payments due and should provide payment options available with the designated financial institution.
2	F2.2	Aggregate Premium	
3	F2.2.1		The system shall provide the functionality to aggregate the individual premiums for all family members into a single monthly invoice, including any subsidized healthcare plan.
2	F2.3	Automate Premium Reconciliation	
3	F2.3.1		The system shall provide the functionality to electronically receive and record premium payment details from the designated financial institution.
3	F2.3.2		The system shall provide the functionality to automatically and manually reconcile individual premium payments with HIX enrollment data.
3	F2.3.3		The system shall provide the functionality to track QHP gross premium rates per month per enrollee.
3	F2.3.4		The system shall provide the functionality to receive payment history from the Issuer, and to reconcile Issuer premium payment history.

Level	#	Business Requirement	Requirement Description
3	F2.3.5		The HIX System shall provide the functionality to generate a report of all individuals enrolled in QHPs for the upcoming month along with the amounts of gross premiums, Tax Credits and Cost Sharing Reductions associated with the individuals and transmit to CMS Federal Data Hub electronically.
3	F2.3.6		The system shall provide the functionality to receive an electronic report of Tax Credits and Cost Sharing Reductions payments from the IRS or Federal Data Hub and record and reconcile these payments with HIX data.
2	F2.4	Identify Delinquent Accounts	
3	F2.4.1		The system shall provide the capability to identify delinquent accounts and provide notice to enrollees of non-payment of premium, the amount past due, and the coverage termination date if payment is not received.
3	F2.4.2		The system shall provide the functionality to process non-payment of premiums and utilize configured grace periods for termination notices.
1	F3.1	**Individual Eligibility/Enrollment**	The system shall provide the capability to enable assessment of eligibility of an individual for QHPs, facilitate comparison shopping for the individual, and process enrollment.
2	F3.1.1	Screening	
3	F3.1.1.1		The system shall provide the capability for the consumer to complete a high-level screening without disclosing identifying information to screen for potential eligibility for subsidized and unsubsidized private coverage (e.g. Resident of CT, Zip Code, Age, Family or Individual, Income). The high-level screening process shall not require verification.

Level	#	Business Requirement	Requirement Description
3	F3.1.1.2		The system shall display the results of the high-level screening, information about potential or likely benefits (if applicable) and provide recommended next steps.
3	F3.1.1.3		The system shall provide the capability for the consumer to view all available plans offered through the Exchange at their face value without providing any PII information or registering for an account.
3	F3.1.1.4		The system shall provide the capability to prepopulate the data input by consumer in a high-level screening (income, household composition, etc.) into application process if a consumer chooses to apply for insurance based on results of a high-level screening provided the consumer is in the same session (where appropriate).
3	F3.1.1.5		The system shall allow consumer to interact in their language of choice, English or Spanish. The system shall also provide language support in on-screen communications in the English and Spanish.
3	F3.1.1.6		The system shall provide an online calculator for an individual to estimate potential eligibility as well as potential subsidy for multiple categories of qualified health plan benefits.
3	F3.1.1.7		The system shall provide information to individuals / applicants regarding minimum coverage requirements (individual mandate) as per the ACA, including definition of minimum essential benefits.
2	F3.1.2	Application	
3	F3.1.2.1		The system shall accept an application from an individual (and his or her household) for enrollment in a qualified health plan, APTC, CSR, and Medicaid, CHIP, and the Basic Health Program on paper or via web (including telephonic applications). Exchange may be notified of potential individual eligibility by an In-State Medicaid, CHIP, or Basic Health Program.

Level	#	Business Requirement	Requirement Description
3	F3.1.2.2		The system shall dynamically populate data collection/application questions based on initial and secondary screening questions.
3	F3.1.2.3		The system shall accept changes reported by an individual to his or her personal information.
3	F3.1.2.4		The system shall perform line-level edits to validate basic integrity of the application submission, including validating that required fields are completed and information provided is accurate (e.g., address validity). This is envisioned as a generalized service that will apply to all application submissions and updates for Individual Eligibility & Enrollment and Individual Responsibility Exemption.
3	F3.1.2.5		The system shall utilize / create a single client identifier for the Exchange, and if applicable, forward this identifier for use by Medicaid and CHIP at the point of application / account creation.
3	F3.1.2.6		The system shall provide the ability to cross reference other individual identifiers including, but not limited to, those in the Medicaid, SERFF, AHIE, and the Federal Hub systems.
3	F3.1.2.7		The system shall coordinate the review of supporting documentation provided by the individual to substantiate status.
3	F3.1.2.8		The system shall provide the capability for individuals to access in-depth online help during the application process.
3	F3.1.2.9		The system shall provide field level help for each application data element that includes description and required data format.
3	F3.1.2.10		If an application is initiated by a Navigator, the Exchange shall have the capability for the individual to attest that the information provided by the Navigator is accurate.

Level	#	Business Requirement	Requirement Description
3	F3.1.2.11		The system shall provide the capability to flag and track applications that are completed with the assistance of a Broker or Navigator.
3	F3.1.2.12		For individuals who do not have an SSN, allow the application process to proceed (e.g. newborns and undocumented individuals).
2	F3.1.3	Verification	
3	F3.1.3.1		The system shall, to the maximum extent possible, use the Federal Data Hub (CCIIO) as described by CMS to initiate immediate real-time verification of SSN, identity, citizenship/national/lawful presence, income, household size, and other factors, as described by CMS.
3	F3.1.3.2		The system shall use information from state systems (including but not limited to DMV, DOL, DOC) to supplement information required for verifications from the Federal Data Hub (CCIIO) as required.
3	F3.1.3.3		The system shall provide the capability to verify individual's eligibility for public Minimum Essential Coverage (MEC) through interaction with Medicaid, CHIP, and Basic Health Program for enrollment within state.
3	F3.1.3.4		The system shall verify whether an individual is eligible for Other Public MEC (e.g., TRICARE and Medicare) by using a third-party verification service.
3	F3.1.3.5		The system shall provide the capability to verify individual's eligibility for employer-sponsored MEC by using a third-party verification service and verify with other information sources whether individuals in a household have access to affordable employer-sponsored MEC that meets the minimum value requirement.
3	F3.1.3.6		The system shall provide the capability to verify individual's lawful presence (including citizenship and status as a national).

Level	#	Business Requirement	Requirement Description
3	F3.1.3.7		The system shall provide the capability to verify individual's household size and MAGI with information from the Federal Data Hub and other state information sources and handle alternate process for documentation of income and household size.
3	F3.1.3.8		The system shall provide the capability to verify whether an individual is a Native American in order to determine eligibility for CSR, individual responsibility exemptions, and special enrollment periods. May involve documentation review.
3	F3.1.3.9		The system shall provide the capability to verify an individual's incarceration status using Department of Corrections.
3	F3.1.3.10		The system shall allow for consumer attestation to substantiate status in the event that federal and state systems are unable to substantiate individual verfications through automated inquiries. May include attestation for age, DOB, relationship, and State residency.
3	F3.1.3.11		The system shall display the result of the verification provided by Federal Hub (and other sources) so an individual has the means to dispute or call into question the validity of data from authoritative sources.
3	F3.1.3.12		The system shall, wherever possible, implement verifications via electronic interfaces in preference to paper-based solutions. Electronic interfaces shall be used, wherever possible for both primary sources (e.g., the Federal Data Hub for wage information) and for secondary sources (e.g., DOL for more recent wage information) Verification processing may be invoked during an application, a reported change in circumstance, a renewal (redetermination) or data match processing.
3	F3.1.3.13		The system shall use the Department of Labor for unemployment and wage data when there is a conflict

Level	#	Business Requirement	Requirement Description
			in value or circumstances with income from the federal hub.
3	F3.1.3.14		The system shall verify non-wage type income sources using electronic means wherever possible.
3	F3.1.3.15		The system shall verify income deductions using electronic means wherever possible.
3	F3.1.3.16		The system shall implement an ESB interface with DSS to confirm whether an individual is enrolled in an existing Medicaid, CHIP or BHP (to be decided) program.
3	F3.1.3.17		The system shall verify Representation via the submission of paper documents.
3	F3.1.3.18		The system shall allow the membership in an exempt group to be verified by the submission of the applicable paper documentation. Fiscal hardship as an exemption reason shall use the standard electronic fiscal verification processes.
2	F3.1.4	Determine Eligibility	
3	F3.1.4.1		The system shall provide the capability to determine eligibility based on account information and established business rules.
3	F3.1.4.2		The system shall be able to perform automated eligibility determinations and determine employer contributions, tax credits, other financial benefits for private coverage and State medical program benefits based on eligibility criteria and hierarchy.
3	F3.1.4.3		The system shall perform eligibility determinations and determine specific benefits based on verified input data and a hierarchy of applicable rules and an internal benefit calculator.
3	F3.1.4.4		The system shall capture and store all eligibility determinations and permanently archive this information for future reference.

Level	#	Business Requirement	Requirement Description
3	F3.1.4.5		The system shall record actions related to the personal identifiable information (PII) provided for determining eligibility, i.e. the date, time, client identification, and user identification must be recorded when electronic eligibility information is created, modified, deleted, or printed and an indication of which action(s) occurred must also be recorded.
3	F3.1.4.6		The system shall compile a "case log" on the customer's interaction with the system to enable the contact center to assist the customer or to answer questions regarding the application or eligibility process.
3	F3.1.4.7		The system shall check the application for all valid values at point of entry or after submittal; errant entries shall be identified for the user to correct prior to finalizing submission.
3	F3.1.4.8		The system shall automatically deny an application if the customer fails to provide the required information.
3	F3.1.4.9		The system shall display the eligibility determination, information about benefits (if applicable) and provide recommended next steps, e.g. 1. Eligible for public program, show program(s) and benefit(s), 2. Eligible for subsidized private insurance, show subsidy amount, 3. Not eligible for subsidized private insurance, 4. Exit.
3	F3.1.4.10		The system shall indicate the reason for ineligibility determination and identify any gaps.
3	F3.1.4.11		The system shall present eligible programs and benefits for each household member in a format that is easy to read and interpret.
3	F3.1.4.12		The system shall have the capability to determine eligibility for the collective household, by individual household member, including complex household scenarios when members of the same household can

Level	#	Business Requirement	Requirement Description
			be eligible to enroll in individual exchange, SHOP, and/or State medical programs insurance (or a combination of above).
3	F3.1.4.13		The system shall have the capability (with appropriate access permissions) to override an eligibility determination.
3	F3.1.4.14		The system shall provide the capability to determine whether an individual who has been determined eligible to enroll in a qualified health plan is eligible for an enrollment period.
3	F3.1.4.15		The system shall provide the capability to calculate the Federal Poverty Level (FPL) of a household that has requested screening for Advance Premuim Tax Credits (APTC), Cost Sharing Reductions (CSR), and participation in Medicaid, CHIP, and the Basic Health Program (if applicable).
3	F3.1.4.16		The system shall provide the capability to calculate an eligible applicant's level of APTC to determine whether a member is eligible for tax credit and premium subsidies based on benchmark QHP annual premium (second least expensive silver QHP) and maximum annual premium (based on applicant MAGI income).
3	F3.1.4.17		The system shall provide the capability to determine an eligible individual's eligibility category for CSR based on household FPL and whether an individual is a Native American. For applicants below a certain FPL limit indentified per federal guidelines, the system shall determine whether a member is eligible for reduced cost sharing for a silver QHP based on HHS unique maximum out-of-pocket amounts associated with three bands of MAGI relative to FPL.
3	F3.1.4.18		The system shall inform the applicant of the health plans for which reduced cost sharing/tax credit is available and display clear information on eligible subsidies or other contributions which affect individual's monthly premiums.

Level	#	Business Requirement	Requirement Description
3	F3.1.4.19		The system shall determine the next available period for open enrollment after an individual has been determined eligible to select a QHP. The open enrollment period should be tracked separately from timeframes for eligibility renewals for Medicaid / CHIP/ Tax Credits.
2	F3.1.5	Other Services and HHS Programs	
3	F3.1.5.1		The system shall provide the capability to refer individuals who may be eligible for enrollment in Medicaid based on criteria other than MAGI to Medicaid and CHIP for additional screening. This includes individuals who indicate that they may be disabled and involves interaction with Medicaid and CHIP for receiving results of additional screening.
2	F3.1.6	Data Matches	
3	F3.1.6.1		The system shall perform reasonable data matches, as per CMS policy, for APTC and CSR recipients, and initiate appropriate business flows.
3	F3.1.6.2		The system shall match on the record of someone's death. Use information from DPH / Vital Statistics.
3	F3.1.6.3		The system shall use a third party service to find out whether someone has another MEC.
3	F3.1.6.4		The system shall use PARIS to determine if someone is receiving benefits in a different State (i.e. State residency discrepancy) and hence ineligible for QHP, APTC and CSS.
3	F3.1.6.5		The system shall use PARIS to determine if someone is receiving an alternative form of a MEC and hence ineligible for APTC and CSS.
3	F3.1.6.6		The system shall periodically interface with DSS to identify individuals now enrolled in Medicaid and CHIP and so ineligible for subsidized QHP.

Level	#	Business Requirement	Requirement Description
1	F3.2	Comparison Shopping	The system shall enable comparison of selected products or services.
2	F3.2.1	QHP side-by-side comparison tool	
3	F3.2.1.1		The system shall determine which qualified health plans are available in an individual's geographic area and compute personalized cost information to support an individual's comparison of qualified health plans.
3	F3.2.1.2		The system shall store enrollment questionnaire responses and display plan choices based on questionnaire / filtering criteria.
3	F3.2.1.3		The system shall, if applicable, display an adjusted plan cost based on reduced cost sharing or tax credit advance eligibility. For individuals eligible for reduced cost sharing, limit the initial display of plans to those for which reduced cost sharing applies.
3	F3.2.1.4		The system shall provide an individual the capability to apply the Tax Credit Advance (if eligible) to his / her monthly premium payment or decline all or part of the advance.
3	F3.2.1.5		The system shall generate on-screen notification to individuals who select at Tax Credit Advance of the possibility of tax penalties / liabilities at time of tax filing should their annual income increase. Include the amount of annual income increase that should concern the individual notified.
3	F3.2.1.6		The system shall include tools to search, sort, and filter plans. These tools shall be on the same page with the plans displayed.
3	F3.2.1.7		The system shall include administrative tools to update dynamic search data such as provider networks, providers, health specialty areas, etc.
3	F3.2.1.8		The system shall provide the capability for the user to select a subset of eligible plans for closer comparison.

Level	#	Business Requirement	Requirement Description
3	F3.2.1.9		The system shall enable the customer to search and sort based on various criteria, including but not limited to: -net price (plan cost less subsidy or employer contribution), -deductable, -location/availability of network and out of network providers, -plan quality rating, -health specialty area, -options.
3	F3.2.1.10		The system shall display plans such that the user can drill down to more detail on any particular plan.
3	F3.2.1.11		The system shall display health insurance plans for which the individual and/or members of the household are eligible.
3	F3.2.1.12		The system shall display plans in a consistent format showing relevant information (e.g. issuer, price, deductable, network, rating).
3	F3.2.1.13		The system shall present plans by metal levels of coverage (Bronze, Silver, Gold or Platinum) to enable side-by-side comparison of similar plans, i.e. silver and gold from each issuer.
3	F3.2.1.14		The system shall allow to define a default order to present plans based on one or more of the plan attributes.
3	F3.2.1.15		The system shall be able to adjust preference sliders and forecast annualized out-of-pocket costs.
1	F3.3	Enrollment Processing	The system shall enable plan or program enrollment, renewals and termination.
2	F3.3.1	Enrollment	
3	F3.3.1.1		The system shall enable the review of available qualified health plans and accept an individual's

Level	#	Business Requirement	Requirement Description
			selection of a qualified health plan.
3	F3.3.1.2		The system shall capture and store customer plan selection transactions.
3	F3.3.1.3		After plan selection and collection of required enrollment information, the system shall provide next steps (i.e. proceed to payment) message, including issuer contact information and links to the issuer).
3	F3.3.1.4		The system shall determine whether an individual who is selecting a qualified health plan is already enrolled in another qualified health plan in order to disenroll him or her from his or her prior qualified health plan.
3	F3.3.1.5		The system shall transmit a notification of an individual's disenrollment from a qualified health plan to the qualified health plan issuer for appropriate disenrollment processing by the issuer. The system shall also transmit the disenrollment notification to CMS for records management.
3	F3.3.1.6		The system shall address the special circumstances of enrollment for Native Americans.
3	F3.3.1.7		The system shall provide the capability to calculate a year-to-date average for premiums paid and monthly income for display to the individual at time of renewal.
3	F3.3.1.8		The system shall automatically enroll an individual / household into a default health plan for a geographic area if the individual's current plan is no longer available.
3	F3.3.1.9		The system shall provide the ability to open a special enrollment period to enable enrollment outside the defined open enrollment periods. Purpose codes must be supported for these special enrollment periods.
2	F3.3.2	Renewal	

Level	#	Business Requirement	Requirement Description
3	F3.3.2.1		The system shall coordinate the renewal of an individual's eligibility and enrollment including re-determination of the individual's eligibility for enrollment in a qualified health plan; APTC; CSR; and Medicaid, CHIP, and the Basic Health Program.
3	F3.3.2.2		The system shall support automatic renewals at specified timeframes.
2	F3.3.3	Disenrollment	
3	F3.3.3.1		The system shall produce an electronic notification to the Issuer to disenroll an individual if an individual initiates a voluntary disenrollment through the Exchange and not directly with the Issuer.
3	F3.3.3.2		The system shall update user accounts based on disenrollment notification from issuers or disenrollments initiated by the Exchange.
1	F3.4	Appeals Management	The system shall enable recording of an appeal and the results of an appeal.
2	F3.4.1		The system shall adjust an individual's eligibility determination based on the outcome of his or her eligibility appeal.
2	F3.4.2		The system shall receive eligibility appeal request from an individual to appeal his or her eligibility determination and adjudicate appeal. May include a review of documentation provided by the individual and an in-person hearing.
2	F3.4.3		The system shall receive eligibility appeal request from an employer to appeal his or her eligibility determination and adjudicate appeal. May include a review of documentation provided by the employer and an in-person hearing.
2	F3.4.4		The system shall stop appeals processing in the event that an individual reports new information during the course of an appeal or at the discretion of the Exchange.

Level	#	Business Requirement	Requirement Description
2	F3.4.5		The system shall provide the capability to track timeout for appeals period.
2	F3.4.6		The system shall provide the ability to receive and process issuer appeals of plan non-certification and decertification.
2	F3.4.7		The system shall provide the ability to notify issuer of successful appeal or denial of appeal regarding plan non-certification and decertification.
1	F4	Individual Responsibility Exemption	The system shall provide the functionality to process individual responsibility exemption requests.
2	F4.1		The system shall provide the capability to coordinate the renewal of an individual's exemption from the individual responsibility requirement. Certain exemptions may not require renewal.
2	F4.2		The system shall provide the functionality to process, verify, determine eligibility and track individual exemption request information, including categories and denials.
2	F4.3		The system shall flag an individual application if it indicates potential for eligibility exemption.
2	F4.4		The system shall provide the functionality to notify CMS Federal Data Hub of verified exemption requests with periodic reports as appropriate.
2	F4.5		The system shall provide the capability to verify an individual's qualification for an exemption from the individual responsibility requirement, including but not limited to individual's status as a member of an exempt religious sect or division, as a member of a health care sharing ministry, as a Native American, or as an individual eligible for a hardship exemption; lack of affordable coverage or the individual's status as a taxpayer with household income less than 100 percent of FPL

Level	#	Business Requirement	Requirement Description
2	F4.6		The system shall accept an application from an individual when the individual has requested an exemption from the individual responsibility requirement.
2	F4.7		The system shall accept an application to update individual exemption status from an individual when the individual has requested to update an exemption from the individual responsibility requirement.
1	F5	Account Management	The system shall create and maintain accounts for individuals and issuer. For individuals and issuers, these accounts would include the application, application updates, supporting documentation, data verifications, eligibility determinations, enrollments, user credentials, and history of changes and notifications. Includes ability to create, retrieve, update, freeze, close, and report on accounts.
2	F5.1		The system shall create user accounts during the application process: • User unique identifier • User demographic information • Application status • Enrollment status • Existing program eligibility (Medicaid, CHIP) if any
2	F5.2		The system shall create a user account that features a user-defined username and password.
2	F5.3		The system shall support individual household member (in the Individual Exchange) - primary system user (Account management, pre-screening, eligibility, plan shopping, enrollment).
2	F5.4		The system shall support contact center staff (in the Individual Exchange) - provides consumer assistance and administrative support functions.
2	F5.5		The system shall support contact center supervisor (in the Individual Exchange) - provides management support for staff.

Level	#	Business Requirement	Requirement Description
2	F5.6		The system shall support plan approver (in the Individual Exchange) - provides role for HIX to approve plans prior to posting.
2	F5.7		The system shall support issuer administration (in the Individual Exchange) - works with issuers to load plans into Exchange.
2	F5.8		The system shall support internal HIX employees (in the Individual Exchange) - provide HIX related administrative support functions.
2	F5.9		The system shall support HIX Executives (in the Individual Exchange) - provide management support for staff.
2	F5.10		The system shall support DSS case workers (in the Individual Exchange) - provide case management support.
2	F5.11		The system shall provide access to system functionality (screens and what a user can do on a screen), data, reports, etc. based on these roles.
2	F5.12		The system shall provide the functionality for individuals and issuers to select and update their account preferences for communication methods (mail, email, text, telephone).
2	F5.13		The system shall provide the functionality for "anonymous user accounts" that support users to prescreen for eligibility and browse plans they might qualify for. The system shall not store any account information for such users.
2	F5.14		The system shall provide the functionality to track the licensing and certification related details pertaining to Brokers / Navigators.

APPENDIX G – TECHNICAL REQUIREMENTS

Level	#	Business Requirement	Requirement Description
1	T1.1	System Architecture	The system shall meet the best in class standards for a modern software system. It shall leverage pre-built software and COTS products to the greatest extent possible. It shall have a service-oriented architecture for messaging between major internal components and for exposing services (APIs).
2	T1.1.1	Prebuilt and Commercial Off The Shelf (COTS) software	
3	T1.1.1.1		The system shall allow implementation to involve minimal new software development.
3	T1.1.1.2		The system shall try to consist of either a prebuilt COTS software package that was specifically developed to support a HIX ("single integrated solution") or shall consist of independent COTS components that are configured and integrated to meet the HIX requirements ("systems integrated solution.") In the case of a systems integrated solution, the software shall already be demonstrably integrated.
2	T1.1.2	Architecture	
3	T1.1.2.1		The system shall conform to an N-Tiered Web architecture that will realize and enable a Service Oriented Architecture (SOA) design.
3	T1.1.2.2		The system shall have a Web service API for the major system components, e.g., Rules Engine, Workflow Engines, and Master Person Index.
3	T1.1.2.3		The system shall comply with the recommendations issued pursuant to section 1561 of the Affordable Care Act and shall externalize all the business rules from the application.

Level	#	Business Requirement	Requirement Description
3	T1.1.2.4		The system shall align with the "Zoned Architecture" defined in CMS Exchange Reference Architecture: Foundation Guidance.
3	T1.1.2.5		The system shall align with the CMS Exchange Reference Architecture's (ERA) framework.
3	T1.1.2.6		The system shall be on the latest version of its COTS software as of six (6) months prior to the planned production go-live date and avoid interference with timeline of the production launch where possible.
3	T1.1.2.7		The system shall preferrably use Java and the Java runtime environment when custom server code is developed. Reports, Rules Engines and Workflow Engines, for example, may alternatively use high-level scripting or natural languages.
3	T1.1.2.8		The system shall allow the possibility of mobile apps.
3	T1.1.2.9		The system shall leverage systems previously installed where possible.
2	T1.1.3	Search Screens	
3	T1.1.3.1		The system shall provide search and list screens to support the business processes, i.e., not just limited to those explicitly specified in the requirements.
3	T1.1.3.2		The system shall provide a user search screen so that internal (professional) users can find other internal system users and their contact details, e.g., email and

Level	#	Business Requirement	Requirement Description
			phone details. Should be able to search on names (including phonetically and using wild cards), email addresses, phone numbers, etc.
3	T1.1.3.3		The system shall provide a citizen search screen that can be used by professional users to find citizens/clients. Search criteria include: 1. First name, last name and middle name - the search shall swap the order of these names to try to find a match and shall be case insensitive and also allow for wildcards and phonetic searches (e.g. soundex or double metaphone) 2. Telephone number 3. Street address 4. DSS client identifier or case number 5. HIX client identifier 6. Date of birth
3	T1.1.3.4		The system shall allow ANSI SQL wildcards and placeholders (% and _) to be acceptable/allowed but the preferred (documented in manuals, etc.) equivalents are the more user intuitive * and ?
2	T1.1.4	Public Identifiers	
3	T1.1.4.1		The system shall allow the database to use "internal" meaningless sequence numbers to identify entities but these numbers will typically be hidden from public (citizen) users. The system shall have "public identifiers" that it makes visible to citizens, providers and employers as appropriate.
3	T1.1.4.2		The system shall allow public identifiers to not be unnecessarily long, e.g., do not require 15 digits if 7 digits would be satisfactory.
3	T1.1.4.3		The system shall allow public identifiers to have a consistent length, e.g., the first number in a seven digit identifier shall be 1000000 (or 0000001) and not 1.

Level	#	Business Requirement	Requirement Description
3	T1.1.4.4		The system shall allow public identifiers that are longer than 6 digits to typically have a check digit/letter as the final digit, e.g., use IBM modular 11 check digit algorithm.
3	T1.1.4.5		The system shall allow public identifiers to be displayed on screens and in correspondence with a reader friendly format mask / template (e.g., 123-12-3232-8, 123-122-123-A) but stored in the database without formatting characters or check digit.
3	T1.1.4.6		The system shall allow screen input fields to accept public identifiers, with or without format mask characters, and the logic shall be smart enough to strip out any formatting characters prior to performing database actions.
3	T1.1.4.7		The system shall allow public identifiers to be immutable (cannot be changed) but if record instances are merged, for example, then it is possible that a given entity instance will have multiple identifiers. When an entity has multiple identifiers, one identifier shall be considered the prime (master) identifier and used in ongoing correspondence, etc. However, all identifiers remain valid (just no longer "published") and can be used in search screens to find entity occurrences or on interfaces with external organizations that may not be aware of the merges.
2	T1.1.5	Batch	The system shall allow batch programs to be triggered by physical events (e.g., arrival of a file) or temporal events (e.g., last day of the month.) Batch programs will be needed for many processes including data matches, system interfaces, triggering eligibility (e.g., people turning 65), and renewals.
3	T1.1.5.1		The system shall provide a job scheduler or evaluate reuse of the BEST scheduler. The scheduler shall include a visual representation of batch schedules and that allows the flexible configuration of processing schedules. BEST currently has a scheduling solution that may satisfy this requirement and shall be evaluated for reuse. The scheduler shall provide support for the ability to setup

Level	#	Business Requirement	Requirement Description
			batch job execution based on: A. Time of day B. Date C. Processing cycle (daily, weekly, Monthly, Yearly, Quarterly.) D. Upon request.
3	T1.1.5.2		The system shall allow daily batch schedules to typically start after 8.00pm at night and finish processing before 12.00pm.
3	T1.1.5.3		The system shall provide online access to processing statistics from within the professional-user Portal for designated users.
3	T1.1.5.4		The system shall allow the individual batch jobs to produce an output log that records critical processing statistics such as records read, records written, records failed, FPL totals (for example), etc.
3	T1.1.5.5		The system shall alow rules (assertions) to be written that can look at the output log of a batch job and take appropriate actions such as pausing the batch run, sending an email, sending a text message, etc. For example, if the amount of people who failed to be renewed for APTC is greater than 10% then send appropriate emails and if it is greater than 30% then pause the schedule and notify support.
3	T1.1.5.6		The system shall allow output and error logs to be viewable online from within the professional user Portal for designated users.
3	T1.1.5.7		The system shall allow correspondence (letters, forms, notices, etc.) that are generated by programs such as Renewal to be written to a queue. The queue is sent to the printer queue only after the assertions have determined that the program (e.g., Renewal) is within operating norms.
3	T1.1.5.8		The system shall allow batch programs to operate with an input date so that they can be rerun with a different (not today's) date and so that a run is immune as to whether it

Level	#	Business Requirement	Requirement Description
			starts before or after midnight or spans midnight.
1	T1.2	Product Standards	It is a requirement that the HIX application meets the standards and guidelines as defined by BEST as well as meeting any specific technology preferences identified by the HIX. Where products are proposed, for product categories in which BEST and HIX are silent, these products must meet the product principles outlined by BEST.
2	T1.2.1	BEST CTEA	
3	T1.2.1.1		The system shall meet BEST Connecticut Enterprise Architecture (CTEA) standards.
3	T1.2.1.2		The system shall, where the eight BEST CTEA Technical Architecture (TA) domain documents specify a relevant product category, use one of the Supported (i.e., not Transitional and not Obsolete) products referenced. The CTEA domains are: 1. Application / Web Development 2. Collaboration & Directory Services 3. Data Management 4. Enterprise Systems Management 5. Middleware 6. Networking 7. Platform 8. Security
3	T1.2.1.3		The system shall, where the proposed solution recommends a product for a product category that is not referenced by the BEST CTEA domain documents then the product must satisfy the seven (7) general architectural principles of the BEST Enterprise Architecture Standards Process (EASP): 1. Product choices and solution architectures shall minimize overall total cost of ownership. 2. Product choices and solution architectures must

Level	#	Business Requirement	Requirement Description
			provide for and enhance the overall security and integrity of systems and information assets. 3. Product choice decisions must consider the availability of training and technical support. 4. Product choices and solutions shall minimize short term and long term risks. This can be partially accomplished by utilizing widely supported products or those with long-term support commitments by vendors (see Principle 6.) 5. Solution architectures shall maximize information sharing among agencies and applications. 6. Product standards will consist of vendor-supported versions only; this includes open source products. 7. New products and version/release upgrades for existing products will not become standard until a minimum 6 months has passed after the manufacturer's General Availability date.
2	T1.2.2	DBMS	
3	T1.2.2.1		The system shall be able to work on different database platforms, e.g., Oracle and DB2
3	T1.2.2.2		The system shall use DB2 as their operational database for MCSD and as such there is a preference for DB2 (as chosen by DSS).
2	T1.2.3	CMS and Health Standards	
3	T1.2.3.1		The system shall comply with: A) CMS Exchange Reference Architecture: Foundation Guidance (ERA Foundation Guidance Draft 0 99_03162011.pdf) B) Connecticut specific enhancements to CMS ERA as described in the business RTM C) Medicaid Information Technology Architecture (MITA) (http://www.cms.gov/MedicaidInfoTechArch/04_MITAFramework.asp#TopOfPage

Level	#	Business Requirement	Requirement Description
3	T1.2.3.2		The system shall comply with the following Business Transaction standards as mandated by Affordable Care Act: A) HIPAA Transaction Standards for electronic health care transactions. B) Electronic Eligibility and Enrollment rules as described in HIT Policy and Standards found at http://healthit.hhs.gov/portal/server.pt?open=512&mode=2&objID=3161. C) Standardized Information Exchange Model based on NIEM found at: Appendix B Core Data Analysis: http://healthit.hhs.gov/pdf/electronic-eligibility/appendix-b.pdf
2	T1.2.4	Enhanced Federal Financial Requirements - 7 conditions and standards	Under sections 1903(a)(3)(A)(i) and 1903(a)(3)(B) of the Social Security Act, the Centers for Medicare & Medicaid Services (CMS) has issued standards and conditions that must be met by the states in order for Medicaid technology investments (including traditional claims processing systems, as well as eligibility systems) to be eligible for the enhanced match funding. The final regulation establishing these standards and conditions was made public on April 14, 2011.
3	T1.2.4.1		The system shall meet Modularity Standards.
3	T1.2.4.2		The system shall meet MITA Conditions (specifically MITA 3.0).
3	T1.2.4.3		The system shall meet Industry Standards Conditions.
3	T1.2.4.4		The system shall meet Leverage Conditions.
3	T1.2.4.5		The system shall meet Business Results Conditions.

Level	#	Business Requirement	Requirement Description
3	T1.2.4.6		The system shall meet Reporting Conditions.
3	T1.2.4.7		The system shall meet Interoperability Conditions.
1	T1.3	Performance and Scalability	The system shall perform consistently and efficiently under normal and peak loads.
3	T1.3.1		The system shall be able to support 500 concurrent internal users at the prescribed performance levels. This is an initial estimate that may be adjusted.

Level	#	Business Requirement	Requirement Description
3	T1.3.2		The system shall be able to support 3,000 concurrent external users at the prescribed performance levels.This is an initial estimate that may be adjusted.
3	T1.3.3		The system shall be able to minimally support up to 1,500,000 clients in the client index with an anticipated growth rate of 10% per year for 10 years.This is an initial estimate that may be adjusted.
3	T1.3.4		The system shall allow the display of a populated web page to take less than one (1) second 95% of the time. For the most common pages this shall be honored 99% of the time. No page shall take more than three (3) seconds to display. These can be measured without the effect of the Internet network, i.e., over the local network. The external interfaces need to be understood and compensated for as part of the performance requirement. Appropriate performance indexes should be defined for all parts of the application including interfaces to external components and systems. The vendor shall specify and use performance measurement tools to provide consistent performance evaluation and reports.

Level	#	Business Requirement	Requirement Description	
3	T1.3.5		The system shall allow the submit and redisplay, or navigation, of a web page to take less than one (2) second 95% of the time. For the most common user actions this shall be honored 99% of the time. No action or page shall take more than three (3) seconds. These can be measured without the effect of the Internet network, i.e., over the local network. The external interfaces need to be understood and compensated for as part of the performance requirement. Appropriate performance indexes should be defined for all parts of the application including interfaces to external components and systems. The vendor shall specify and use performance measurement tools to provide consistent performance evaluation and reports.	

Level	#	Business Requirement	Requirement Description
3	T1.3.6		The system shall be designed to the greatest extent possible so that the performance/latency of the external system does not adversely affect the required performance, e.g., asynchronous and background messaging when a user action results in communications with other systems (e.g., the federal hub or the DSS eligibility system).
3	T1.3.7		The system shall allow eligibility rules processing (MAGI Medicaid, CHIP, QHP, CSS and APTC) to take less than 0.5 seconds for a household of five (5) people and less than 0.1 seconds for a single-person household. This performance shall include any time needed to fetch supporting data from the database and the round trip messaging to the rules engine.
3	T1.3.8		The system shall allow pre-generated reports to be designed so that they can be rendered online in under 5 seconds, i.e., very large reports shall be broken into pages that allow incremental drill down and navigation and so do not adversely affect the network.
1	T1.4	Availability	Both the public and internal user interfaces shall be highly available.
3	T1.4.1		The system shall allow online and batch to be able to run concurrently.
3	T1.4.2		The system shall support fault tolerance and failover of Web, application, database servers, storage devices, and secondary devices such as load balancers in order to support high availability.
3	T1.4.3		The system shall support a configuration with sufficient redundancy in data storage such that any single hardware failure will result in zero loss of committed data.
3	T1.4.4		The system shall operate in a 24x7 on-line environment with the exception of infrequently planned maintenance windows.

Level	#	Business Requirement	Requirement Description
3	T1.4.5		The system shall be available 99.8% per year including planned maintenance, e.g., a maximum of 8.76 hours per annum.
3	T1.4.6		The system shall never be unavailable during core hours (7am until 9pm) for longer than 1 hour.
3	T1.4.7		The system shall minimally display a well formatted informational message, complete with the portal's normal branding ,that asks the user to return at a later point in time when the public facing system is unavailable, for planned maintenance or because of a runtime issue.
3	T1.4.8		The system shall be considered as unavailable if the online response times are a factor of three (3) greater than specified in the requirements.
3	T1.4.9		The system shall allow the HIX to continue operating when a user action results in communications with other systems (e.g., the federal hub or the DSS eligibility system) regardless of the availability of the external system. For example, if the federal hub was unavailable then the citizenship and income verification would be deferred and the user would be notified of their possible options.
1	T2	Service Management	The system shall identify and manage relation and use of loosely coupled software services and messaging between provider components and consumer components in a service oriented architecture.
3	T2.1		The system shall have a Service Registry and Service Bus approach that either directly leverages the DSS Modernization of Client Service Delivery (MCSD) solution or that creates a federated approach (linked message buses) that does not increase the cost or complexity for the maintenance and operation of the extended DSS-HIX enterprise.

Level	#	Business Requirement	Requirement Description
3	T2.2		The system shall use the IBM Tivoli Composite Application Manager for WebSphere SOA, as per the DSS MCSD project, or propose an equivalent toolset that performs this function equally and that does not increase the cost or complexity for the maintenance and operation of the extended DSS-HIX enterprise.
3	T2.3		Business Processes shall be documented using Business Process Modeling Notation (BPMN) and/or WS-BPEL standards as applicable.
3	T2.4		The shall shall develop and expose web services to consumers using the following open standards: A. XML B. WSDL C. SOAP D. WS-I Web Services E. WS-Security
3	T2.5		The system shall include an Enterprise Service Bus that supports the following architectures and standards: A. Medicaid information technology architecture (MITA) B. WS-I guidelines C. NIEM D. HL7
3	T2.6		The system shall include an Enterprise Service Bus that provides the following connectivity services at a minimum: A) Web Services Connectivity: SOAP, REST B) Transport Services: (S)FTP, HTTP(s), JMS providers, RMI, web services, CORBA, DCOM, and e-mail (POP, SMTP, IMAP)
1	T3.1	**User Channels**	The system shall facilitate access to services and communicate with internal users, citizens, employers, QHP issuers and other stakeholders using a variety of media channels.
3	T3.1.1		The system shall support multi-channel inbound access to the Exchange, including: 1. Mail

Level	#	Business Requirement	Requirement Description
			2. Fax 3. Email 4. IVR (DSS and external BPO equipment) 5. Call Center (external BPO users) 6. Web portal(s) - including desktop, tablets and smartphones 7. Document upload on the Web portal
3	T3.1.2		The system shall support multiple outbound channels including: 1. Mail 2. Fax 3. Email 4. IVR (dial out for reminders, etc. Could be DSS and external BPO IVR) 5. Call Center (external BPO users) 6. Text Messages
3	T3.1.3		All channels must support multi-lingual consumer content. Full sets of content are required for English and Spanish languages.
1	T3.2	System Integration Channels	The system shall facilitate interoperability with systems that are external to the enterprise.
2	T3.2.1	General	
3	T3.2.1.1		The system shall interface with other systems using a variety of channels including reliable message oriented middleware (MOM), secure FTP, HTTP, and HTTPS.
3	T3.2.1.2		The system shall use reliable messaging via the Enterprise Service Bus (ESB).
3	T3.2.1.3		The system shall, if possible where the ESB cannot be used to access a remote organization, implement a stub Web service and access it via the ESB. For example if another system sends a periodic file of data then a Web service shall be built, that can be accessed via the ESB, and that queries a table that contains the file's data.

Level	#	Business Requirement	Requirement Description
3	T3.2.1.4		The system shall retain audit copies of all messages sent and received with external systems and all files sent and received with external systems.
2	T3.2.2	Interfaces	
3	T3.2.2.1		The system shall implement all interfaces as described in the CMS blueprint model, or as described in the relevant ACA or relevant Medicaid and CHIP regulations, or as perceived necessary to efficiently implement the required functionality of the Exchange.
3	T3.2.2.2		The system shall validate and correct postal addresses using a remote Coding Accuracy Support System (CASS) certified service or an internally hosted CASS-certified third party address database. The CASS validation software/service shall determine the more precise postal address version (e.g., zip + 4, missing elements such as a

Level	#	Business Requirement	Requirement Description
			NW suffix to the street) and format to the Post Office preferred naming standards. The proposed CASS software should be available as a service on the ESB.
1	T4	Master Person Index	The system shall support identification of a unique person, where multiple records can exist, and the roles they play and provide deterministic and probabilistic matching.
3	T4.1		The system shall have a decoupled centralized registry of a person (client, customer, citizen) that is separate from the HIX, i.e., the HIX is just one system that will use this registry.
3	T4.2		The system shall centralize a small amount of identifying data such as names, SSNs, date of birth, emails and telephone numbers. This data must be kept up to date. It is not required that there is a single "golden view" of the data across the multiple systems of record as these systems remain decoupled.
3	T4.3		The system shall maintain a single identifier for the person and manage the identifier to the standards described in the Application Architecture Identifier requirements.
3	T4.4		The system shall link the person record to their security profile in the LDAP.
3	T4.5		The system shall cross reference the person to alternate system identifiers.
3	T4.6		The system shall provide search capabilities that returns people records with a match confidence weight.
3	T4.7		The system shall provide a mechanism for altering the weighting algorithm.
3	T4.8		The system shall use a search algorithm that uses a Double Metaphone phonetic matching on the names.
3	T4.9		The system shall use a search algorithm that considers/swaps name order, e.g., swap first and middle and last names.

Level	#	Business Requirement	Requirement Description
3	T4.10		The system shall use a search algorithm that matches / weighs the result when there is a transposed digit in the SSN, e.g., 123-12-1212 and 123-21-1212.
3	T4.11		The system shall use a search algorithm that matches / weighs the result when there is a transposed month and day in the date of birth.
3	T4.12		The system shall use a search algorithm that matches / weighs the result when there is a transposed digit in a telephone number.
3	T4.13		The system shall use a search algorithm that matches / weighs the result when there is an email account match without the domain, e.g., example@domain1.com and example@domain2.com.
3	T4.14		The system shall have a batch/periodic process that sweeps the database to identify match possibilities and shall generate an online report of high probabilities. It shall be possible to mark certain matches such that they do not appear in the report again.
3	T4.15		The system shall have the ability to merge the people records and when doing so assign one of the two master identifiers as the preferred master identifier while still maintaining the history of all identifiers.
1	T5.1	Portals	The term "portals" refers to the different user interfaces needed by the HIX solution. We specifically recognize the Public Portal and the Professional User Portal as being the major user interfaces for the system. Although we name these two user interfaces they are both available over the internet and they will still both need different configurations for different user roles, e.g., the Public Portal will be different for consumers and brokers. The two user interfaces could be delivered on the same technical platform and same technology but they may also have differences in order to be optimized for the different type of user, e.g., trained versus untrained, power user versus infrequent user, easy-to-use versus fast-to-use, "any" browser versus a subset of named

Level	#	Business Requirement	Requirement Description
			browsers.
3	T5.1.1		The system shall have Web portal interfaces configured and optimized as required for different user types, including but not limited to, the follow: 1. Citizens (customers) 2. Internal professional users 3. Brokers / Navigators 4. QHP Issuers
3	T5.1.2		The system shall develop the user interface within a Portlet Container (portal server) that includes content management capabilities, e.g., allow the end users to flexibly publish new content (text, images, HTML, PDFs) without the need to involve programmers.
3	T5.1.3		The system shall allow the Portlet Container to be compliant with JSR168 and/or JSR286 and/or Web Services for Remote Portlet (WSRP) and shall aggregate content using these standards.
3	T5.1.4		The system portals shall be implemented using HTML 4.1 Transitional or similar current specification in wide support
3	T5.1.5		The system portals shall not use frames or iframes.
3	T5.1.6		The system portal shall include a link checker utility to periodically verify that content is correctly installed.
3	T5.1.7		The system shall allow the user state to be held on a user's session in preference to extended URL query strings or hidden form fields.
3	T5.1.8		The system shall work with or without cookies, i.e., the session identifier encoded into the URLs if a user does not have cookies enabled.
3	T5.1.9		The system shall allow the user interface to be optimized for 1024 pixel wide screens but shall still work with lower or higher resolutions. The browser shall not display a horizontal scroll bar when viewed with a screen

Level	#	Business Requirement	Requirement Description
			resolution of 1024x768 - even when there is a vertical scrollbar displayed. This screen width is a common minimum specification and is also the common configuration for tablet interfaces.
3	T5.1.10		The system shall allow the user interface to work on a touch-screen tablet interface although it is not necessary to specifically create a custom mobile user interface for tablet computing.
3	T5.1.11		The system shall make it possible to configure (not code) the user interface to be different for different platforms, i.e., different user-agent values. The possible differences shall include: 1. A different primary CSS or an override CSS 2. Different menu options 3. Different home page content This would allow the system to be optimized for a small screen device such as a Smartphone.
3	T5.1.12		The system shall include an optimized Smartphone rendering that possibly limits some complex functionality but that is useful for checking details such as a user's application status and plan details.
3	T5.1.13		The system shall implement all styling using cascading style sheets (CSS.)
3	T5.1.14		The system shall use CSS 2.1 as the main standard. However CSS 3.x features can be used to refine a user interface for more modern browsers (e.g., placeholders) although older browsers shall still work acceptably.
3	T5.1.15		The system shall, if using CSS, allow browser specific CSS extensions to be used for visual refinements (e.g., for rounded corners or for subtly shading scrollbars) providing that there are equivalents for the main browser versions or that the effect is not critical to the appearance.
3	T5.1.16		The system shall include a document that defines the User Interface Standards for the internal and external Web sites. This shall include the palette, the banner

Level	#	Business Requirement	Requirement Description
			design details, fonts, sizing, etc.
3	T5.1.17		The system shall include a document that defines the User Interface Stereotypes for the internal and external Web sites. Stereotypes define the layout, standard message text and operation of the different supported page types, e.g., list , search, form edit, table edit.
3	T5.1.18		The system shall make it possible such that when a person uses the browser to resize (zoom) a page the page shall behave gracefully.
3	T5.1.19		The system shall be compliant with the Section 508 amendment to the 1973 Rehabilitation Act.
3	T5.1.20		The system shall be compliant with the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) 2.0
3	T5.1.21		The system shall be compliant with the Americans with Disabilities Act (ADA.)
3	T5.1.22		The system shall have an accessibility testing solution that incorporates the use of assistive technologies.
3	T5.1.23		The system shall display information in a culturally sensitive manner, taking into consideration color, symbols, format, and overall presentation.
3	T5.1.24		The system shall not use ActiveX, Java Applets and other browser plug-in technologies for the standard operation of the user interface. Exceptions to this policy may be allowed based on explicit Exchange permissions for a scenario, e.g., an embedded video tutorial or an optional spellchecker
3	T5.1.25		The system shall allow a user session to timeout after a specified period. The timeout period shall be configurable for different classes of users and minimally allow different values for the public Web site and the internal (professional user) Web site.

Level	#	Business Requirement	Requirement Description
3	T5.1.26		The system shall allow a user to see, prior to session timeout, a message that warns them of the imminent timeout (e.g., a 1 minute notice) and they shall be able to click this message and keep their server session alive.
3	T5.1.27		The system shall collect and collate statistics on Web portal usage to support reporting requirements and continuous improvements in design.
3	T5.1.28		The system shall have web statistics that capture the entry screens, exit screens, application abandonment frequency/location, % of anonymous users who create accounts, logon duration, session timeouts, time on each page, keyword searches, etc.
3	T5.1.29		The system shall ensure that each web page contains a State/Exchange copyright statement in the copyright meta tag.
3	T5.1.30		The system shall ensure that JavaScript, CSS and other text files to contain a State/HIX copyright statement as a comment.
3	T5.1.31		The system shall create a small cacheable favicon.ico for the HIX.
3	T5.1.32		The system shall support search across all unstructured content.
3	T5.1.33		The system shall allow the content search to be accessible from the different Web portals as both a single "simple search" input field in the banner or navigation area and as a linked "advanced search" page that provides more advanced search options.
3	T5.1.34		The system shall not allow the Web site to attempt to strip off (hide) the standard navigation bars, toolbars and status bars of the browser.
3	T5.1.35		The system shall allow the Back and Next browser navigation buttons to generally work as expected and their behaviors not overridden. Navigation using the Back and Next buttons shall work as smoothly and as consistently with any custom Back and Next type

Level	#	Business Requirement	Requirement Description
			functionality embedded in the web pages. There may be possible exceptions on one or two individual pages where it is deemed as prudent to prevent, to the greatest degree possible, a resubmission of a page.
3	T5.1.36		The system shall allow for an acceptably formatted browser print from any page.
3	T5.1.37		The system shall support the upload of supporting documents in a variety of mainstream formats including, e.g., JPG, PDF, TIFF, TXT, DOC, DOCX, XLS, XLSX. Store documents in a repository and link the workflow step to the documents. Initiate alerts and workflow as necessary.
3	T5.1.38		The system shall be able to post announcements/messages that are displayed on a user's home page. Different messages shall be targeted for different user groups; minimally internal (professional) users and external (public/citizen) users.
1	T5.2	Public Portal	The public portal is the access channel for citizens, brokers, QHP Issuers, etc. This Web channel is arguably the most important channel for consumer interaction and a well designed channel for these users will enable the department to operate with lower head counts and will increase customer satisfaction.
3	T5.2.1		The system shall allow the user interface for public access ("Public Portal") to operate across all mainstream browsers. Mainstream browsers are defined as any browser that has greater than 2% of the US browser market or greater than 2% of the US mobile-browser market and all versions of that browser within the last 4 years and across all supported operating systems.
3	T5.2.2		The system shall, if the a browser is known to not be supported then allow the portal to present an information page to the user, i.e., fail gracefully.

Level	#	Business Requirement	Requirement Description
3	T5.2.3		The system shall create a plan, and then execute the plan, for "white hat" Search Engine Optimization (SEO) in order to encourage the indexing and discovery of the web site.
3	T5.2.4		The system shall install a mechanism such as a robots.txt file to discourage the search engine indexing of unimportant details, e.g., of script files.
3	T5.2.5		The system shall install sitemap files to encourage the correct search engine indexing of important web pages.
3	T5.2.6		The system shall explicitly register the sitemaps with minimally Bing, Yahoo and Google.
3	T5.2.7		The system shall add meta tags to the main page(s) to encourage an appropriate indexing of the content.
3	T5.2.8		The system shall document a strategy to ensure that Google and Bing present the web site as "site links" in their search results.
3	T5.2.9		The system shall allow the site link presentation to be agreed by the Exchange. This may include the explicit demotion of some site links in order to draw attention to the main site links, e.g., Get Health Insurance, Understanding Healthcare Options, and Sign In to My Account.
3	T5.2.10		The system shall not be built on an AJAX software model if possible; a more traditional page-at-a-time model shall be preferably used. On an exception basis the use of XMLHttpRequest could be permitted, e.g., to implement the session keep-alive function.
3	T5.2.11		The system shall follow recommended practices and not use HTML tables (<table>) where possible to structure web pages. Tables shall be used to display tabular (list) data. Other HTML tag elements, such as divs, shall be used to structure the layout of web pages and so provide maximum flexibility for layout configuration using cascading style sheets.

Level	#	Business Requirement	Requirement Description
3	T5.2.12		The system shall allow the pages to be developed with zero or close to zero JavaScript. Visual effects shall be accomplished with CSS wherever possible.
3	T5.2.13		The system shall allow the pages to grant access to an online web chat to provide assistance.
3	T5.2.14		The system shall allow the visibility (availability) of the web chat icon/link to be configurable in the database.
3	T5.2.15		The system shall allow the Web chat solution to facilitate the launch of a Co-Browsing ("screen sharing") session.
3	T5.2.16		The system Web pages shall automatically hide the web chat icon based on the day (e.g., a holiday) or time of day.
3	T5.2.17		The system shall allow the display text to be written in plain English and at a 6th grade level unless legal requirements dictate otherwise.
3	T5.2.18		The system shall allow the concepts and design demonstrated in the UX 2014 prototype to be leveraged to the greatest extent possible.
3	T5.2.19		The system shall allow a user to create a Web profile and account at the time they first fill out an eligibility application. This step shall be performed early in the application process so that the user can stop and return to complete the process at their convenience.
3	T5.2.20		The system shall allow the account setup to use either the user's email address or an alternative user- provided name based on a system policy configuration parameter.
3	T5.2.21		The system shall provide links to the DSS client Web site, e.g., to complete a non-MAGI application or view their Medicaid details.
3	T5.2.22		The system shall allow the DSS links to transfer/initiate a session in the DSS client web site without requiring another logon.
3	T5.2.23		The system shall allow the DSS links to either transfer the user's data (e.g., application data) or the DSS Web site shall be able to request (pull) the relevant data from the

Level	#	Business Requirement	Requirement Description
			HIX portal, i.e., not require a user to re-enter data.
3	T5.2.24		The system shall allow the branding across the Public and Professional User Portals to be unified and also complementary to existing State Web sites. However, it is important that the customer (citizen) experience be on a par with the very best private sector Web sites and be inviting, compelling, and non-intimidating.
3	T5.2.25		The system shall allow an implementation plan that incorporates usability sessions with different user groups in order to confirm, refine and optimize the UI design.
3	T5.2.26		The system shall allow the user interface to be multi-lingual and support single and double byte languages.
3	T5.2.27		The system shall allow all translations (e.g., field labels, message text, informational text, notice text) to be stored in the database and updateable by a business user, i.e., it shall not require message catalogs that are maintained by technical staff.
3	T5.2.28		The system shall make it possible to specify English translations, i.e., change the default text values in the database.
3	T5.2.29		The system shall allow translations to be importable and exportable as files (e.g., Excel or CSV) so that it is possible to provide these files to translation services and then perform a bulk update into the system for a language.
3	T5.2.30		The system shall allow the portal to initially be available in Spanish and English. All content shall be available equally in the two languages including all web pages, drop list content, HTML element alt and title attributes, forms, notices, online help, online videos. frequently asked questions (FAQs), links, etc..
3	T5.2.31		The system shall experience no loss in functionality due to pop-up blockers and other toolbars designed to block advertisements.

Level	#	Business Requirement	Requirement Description
3	T5.2.32		The system shall allow video tutorials to be displayed in any mainstream format(s) but shall be available across all supported platforms.
3	T5.2.33		The system shall allow instructional help support to generally be available for each page and for the site as a whole. The design shall consider the best way of embedding help support. This may mean including inline text on some pages, embedding links to supporting pages, embedding videos in a page, providing context specific FAQs, providing online chat support, etc.
3	T5.2.34		The system shall allow the web site wherever appropriate to show progress via the use of Progress Bars.
3	T5.2.35		The system shall provide links/buttons at key points to print out the official notices and eligibility or enrollment results (i.e., correspondence) in a structured and agreed format (possibly using PDF output).
3	T5.2.36		The system shall provide the option to save generated correspondence as a local file.
3	T5.2.37		The system shall provide the option to email generated correspondence. The Web page shall warn if the email is unsecure and sending personally identifiable information (PII) or the email content/attachment shall be encrypted.
3	T5.2.38		The system shall allow the Web site to facilitate the data gathering workflows (e.g., applications and renewals) to continue to the greatest extent possible even when there is missing data or the real time verifications (e.g., the Federal Data Hub) are unavailable. The citizen can add the missing details at a later point (same session of a different session) and any missing verifications shall also be applied later.
3	T5.2.39		The system shall provide a mechanism for a citizen to provide general comments, feedback and recommendations on the Web site design.
1	T5.3	Professional User Portal	This shall be used by internal users of the HIX (workers, plan specialists, CSRs, supervisors, administrators,

Level	#	Business Requirement	Requirement Description
			technical staff and managers) and possibly other professional users in the broader HIX ecosystem (DSS eligibility workers, subcontracted business process outsourcing (BPO) organizations).
3	T5.3.1		The system shall support the user interface for the professional user portal on all browser platforms as specified by BEST and all mainstream browsers. Mainstream browsers are defined as any browser that has greater than 5% of the US browser market or greater than 5% of the US mobile-browser market and all versions of that browser within the last 2 years for the major or State required operating systems for that browser.
3	T5.3.2		The system shall consider custom configurations for the home page for the key user roles. These home pages shall have a "dashboard" look that provides a summary of relevant activity, announcements, messages, consolidated inbox, etc.
3	T5.3.3		The system shall allow online help support for the professional user Web site to be at a page level and for the site as a whole. Training manuals, procedure manuals, policy manuals, overview presentations etc., shall be available online and accessible from the banner menu or home page. The online help text shall include instructions on how to perform certain tasks (e.g., "How do I forward an Inbox alert to my supervisor", "How do we handle the recent incarceration of a household member?") as opposed to being limited to page overviews.
3	T5.3.4		The system shall allow the Web portal to support export functionality for lists to Excel and CSV.
3	T5.3.5		The system shall allow the Web portal to support export of any page to a text (ASCII, RTF or Microsoft Word) and PDF format.
1	T6	Knowledge Management	The system shall support management of content on various electronic media and associated metadata.

Level	#	Business Requirement	Requirement Description
2	T6.1	Search (see Portal requirements)	
2	T6.2	Online Manuals and Online Help (see Portal requirements)	
2	T6.3	Content Management (see Portal requirements)	
2	T6.4	Collaboration	
3	T6.4.1		The system shall include the capability to quickly set up WIKIs to support internal discussion groups.
3	T6.4.2		The system shall include the ability to set up blogs and provide links to them for internal users. This shall be a way for leaders and policy groups to inform and educate.
2	T6.5	Metadata Management	
3	T6.5.1		The system shall create and document a consistent XML taxonomy that uses the same XML tags and attributes for the same data elements and concepts. The taxonomy shall be described using WSDL but there shall be an English language overview of the approach, organization, standards, key elements, naming patterns, abbreviations, etc.
1	T7.1	**Task Workflow**	The system and individuals shall have the ability to generate tasks and route them to individuals or groups of individuals (queues) for later assignment. Some of the tasks may be associated with an inbound document that is held in the repository and others have no associated document. The workflow requirements are described

Level	#	Business Requirement	Requirement Description
			using the following terms: 1. Workflow - this consists of one or more steps that we call tasks. 2. Task - a discrete step or process in a workflow that may be assigned to an individual or may be an automated process. 3. Workflow Engine - the software component that runs and manages the workflows and the step by step execution.
3	T7.1.1		The system shall include a workflow engine that can be used to describe multi-step workflows and can manage the execution of those workflows.
3	T7.1.2		The system shall allow each user to have a consolidated inbox where they can see all of their assigned tasks. In addition, a user may have a work queue where they pull tasks (self assign) that are targeted for their work group(s.)
3	T7.1.3		The system shall provide Inbox lists to be sortable by task type, due date, creation date, priority, etc.
3	T7.1.4		The system shall allow work groups to be defined as collections of individuals and/or roles and/or other work groups and/or organizations.
3	T7.1.5		The system shall make it possible to set up a new workflow or modify an existing workflow so that different tasks are created and assigned using different rules and without requiring technical support or code development.
3	T7.1.6		The system shall make it possible to set up new task type (including its linked resolution screen, priority, etc.), its initiation event/rule, its notification requirements, its assignment or queue rule, its disposition/deletion event/rule, etc., without writing any software code.
3	T7.1.7		The system shall allow a task to have zero, one or more linked objects such as a household, an application, a document, etc. Clicking the link shall open the appropriate screen for the resolution of the task.

Level	#	Business Requirement	Requirement Description
3	T7.1.8		The system shall allow some tasks, based on task type, to be manually dispositioned (completed), i.e., the user completes the task.
3	T7.1.9		The system shall allow some tasks, based on task type, to be automatically dispositioned (completed) when they are viewed, i.e., a notification.
3	T7.1.10		The system shall allow most tasks to be automatically dispositioned (completed) by a system action, e.g., a supervisory task of "Review Application" shall be disposed when the associated application is approved or rejected.
3	T7.1.11		The system shall prompt the completion of a task shall to include a summary resolution statement, e.g. "Application approved by John Smith" and a date and time.
3	T7.1.12		The system shall allow tasks to track/include details such as start date and time, end date and time, priority history, original due date, and assignment history.
3	T7.1.13		The system shall allow tasks to have a due date
3	T7.1.14		The system shall allow different task types to have a priority/criticality associated with them.
3	T7.1.15		The system shall allow a supervisor to be able to see the tasks assigned to their team members.
3	T7.1.16		The system shall allow tasks to be escalated to a supervisor based on configurable date triggers for a type of task, e.g., 1 day past due.
3	T7.1.17		The system shall allow certain life cycle events for a task (type) to trigger notifications which can be sent as text messages and/or emails to different parties. Example events include the creation of a task, the assignment of a task, the completion of a task, the nearing due date of a task, an overdue task, etc.
3	T7.1.18		The system shall allow a notification email to include a link that opens the web pages (after logon if required) at the correct point for resolving the task.

Level	#	Business Requirement	Requirement Description
3	T7.1.19		The system shall allow a supervisor to be able to create an ad hoc task and assign it to a team member.
3	T7.1.20		The system shall allow a supervisor or manager to be able to reassign a task to another team member or themselves.
3	T7.1.21		The system shall allow a supervisor or manager to be able to forward a task to another group or work queue where it is either auto-assigned to an individual or the supervisor for that work queue would assign the task.
3	T7.1.22		The system shall allow an individual to be able to create an ad hoc task (reminder or "to-do") and assign it to themselves.
3	T7.1.23		The system shall allow an individual to be able to see and search their task history.
3	T7.1.24		The system shall allow supervisors and managers to be able to see, search and report on the task history within their organizations.
3	T7.1.25		The system shall allow, where most workflow tasks are for internal users, the citizen to have tasks assigned to them for completion of their applications and their renewals and so have the associated email notifications.
1	T7.2	Document Management	For the purpose of these requirements document management is concerned with the inbound handling of documents (paper, faxes, emails, email attachments and uploads.) The requirements for outbound documents are described in the tab section Business Process Management (Document Management.) Inbound and outbound documents shall share the same repository and outbound documents shall employ barcodes and document identifiers that can be recognized and used in the inbound document management workflows.
3	T7.2.1		The system shall allow documents to arrive via different mechanisms (uploads, emails, faxes, mail) but their

Level	#	Business Requirement	Requirement Description
			processing will be merged into common/shared workflows.
3	T7.2.2		The system shall allow documents to be stored in the existing DSS document repository (FileNet is the preferred repository).
3	T7.2.3		The system shall allow paper documents to be scanned, indexed and processed based on their document types, e.g., verifications, renewals and applications. The web site and outbound correspondence shall provide different (internal) mailing box numbers to help with the processing, e.g., new applications into one stream/box, complaints into another, and so on.
3	T7.2.4		The system shall allow emails and email attachments from citizens to be stored, indexed and processed based on their document types. The web site and outbound correspondence shall include different email addresses for different inbound queues/streams.
3	T7.2.5		The system shall allow faxes to be stored, indexed and processed based on their document types. The web site and outbound correspondence shall include different fax numbers for different inbound queues/streams.
3	T7.2.6		The system shall allow uploads from the web site will be context specific (e.g., the upload of a verification or the upload of complaints information) and so these shall be routed accordingly.
3	T7.2.7		The system shall allow outbound documents to have unique identifiers encoded as bar codes and these shall be leveraged to enable document routing when there is a single generic mail box.
1	T8.1	Alerts and Notifications	This is concerned with the creation and assignment of tasks to individuals and the notification of tasks. Requirements include the escalation of tasks, reassignment, forwarding, roll-up views, reprioritization, etc. The requirements have been consolidated into the Task Workflow sections.

Level	#	Business Requirement	Requirement Description
1	T8.2	Document Generation	This is concerned with the generation of outbound information that can be sent to citizens or organizations such as QHP Issuers. Documents may be mailed, emailed, faxed and/or available online via the Web portal.
3	T8.2.1		The system shall allow supported document types to include standard forms and letters/notices.
3	T8.2.2		The system shall allow different documents to be printed on different stock.
3	T8.2.3		The system shall allow inclusion "inserts" in the outgoing centralized mail, e.g., multi-lingual contact cards.
3	T8.2.4		The system shall merge multiple notices and forms into single envelopes.
3	T8.2.5		The system shall sort outbound correspondence for reduced mailing costs.
3	T8.2.6		The system shall allow correspondence to be capable of being generated in any language including double byte languages.
3	T8.2.7		The system shall allow English and Spanish to be the first set of supported translations.
3	T8.2.8		The system shall allow notices/letters to be generated and embed data about the citizen or organization, e.g., a person's name and address.
3	T8.2.9		The system shall allow new notices to be capable of being defined/setup without the need for custom code.

Level	#	Business Requirement	Requirement Description
3	T8.2.10		The system shall allow all text for generated correspondence to be pulled from the database, i.e., no hard coded paragraphs.
3	T8.2.11		The system shall allow a notice to insert the actual value from the same parameters database as used by the eligibility rules when a notice includes reference to a rule parameter (e.g., 65 in the phrase "less than 65 years").
3	T8.2.12		The system shall allow when a notice includes references to a lookup list (reference data) for the notice to insert the actual value from the same lookup database as used by the rest of the system.
3	T8.2.13		The system shall allow a PDF version of the generated outbound correspondence to be stored in the document repository that is shared with the inbound document management process. The document shall be indexed and linked to the citizen or organization record as appropriate.
3	T8.2.14		The system shall allow a user to view all notice history for a citizen or organization.
3	T8.2.15		The system shall make it possible such that a notice can be viewed in a different language, e.g., view the actual Spanish version from the document repository and also view a version as if it had been created in English (dynamically recreate in English using the original inserted dynamic data values).
3	T8.2.16		The system shall notices to contain PII and health information (e.g., pregnancy) and so access to notices stored in the repository shall be only to those with appropriate security authorization. The security access shall minimally be specified at the notice type level, i.e., which notice types a Role can open.
3	T8.2.17		The system shall allow for a notice to be printed locally with the sensitive PII and health data redacted, e.g., redact all but the last 4 digits of the SSN.

Level	#	Business Requirement	Requirement Description
3	T8.2.18		The system shall allow notices to be be HIPAA compliant and not mix inappropriate content for different individuals in the Household.
3	T8.2.19		The system shall allow each notice to have a unique number printed on each page of the notice along with the equivalent barcode that can be read if it was returned. It shall be possible to use this number to determine the client and the document type.
3	T8.2.20		The system shall have inserted forms that have a separate barcode from any covering letter so that the form can be scanned when it is returned and automatically linked and placed in the correct processing queue.
1	T9	Rules Engine	The system shall support cataloguing, design and execution of eligibility rules and business rules.
2	T9.1		The system shall include a rules engine as a component that is separate/decoupled from the other architectural components.
2	T9.2		The system shall implement the rules engine as a shared service and have a Web service interface and be available via the ESB
2	T9.3		The system shall define taxonomies / schemas for the data models to be passed into the rules engine.
2	T9.4		The system shall have rules that are viewable online and maintainable by business users.
2	T9.5		The system shall have rules that can use effective dated parameter values and reference data valaues that are stored in the database.
2	T9.6		The system shall effective date all rules.
2	T9.7		The system shall be able to export rules to a document format such as Microsoft Word, PDF or Microsoft Excel.
2	T9.8		All eligibility determination and benefit calculation rules shall be implemented in the rules engine including household (filing unit) composition, non-financial

Level	#	Business Requirement	Requirement Description
			eligibility and financial eligibility.
2	T9.9		The system shall have Tier I (Implementation Phase) eligibility rules that shall include: 1. Medicaid eligibility using MAGI 2. CHIP eligibility using MAGI 3. Screening indicators for other Medicaid eligibility coverage (e.g., disability) 4. BHP (if it is ultimately required) 5. QHP eligibility 6. APTC eligibility and calculation 7. CSR eligibility and calculation
2	T9.10		The system shall have Tier II (Implementation Phase) eligibility rules that shall include: 1. Remaining (non-MAGI) Medicaid programs, e.g., ABD 2. Any remaining (non-MAGI) CHIP categories 3. Charter Oaks (if required) 4. Pre-Existing Conditions Insurance Plan (PCIP) (if required) 5. Any remaining State Medical coverage groups
2	T9.11		The system shall implement eligibility determination to meet Connecticut policy requirements. This includes implementing any Federal extensions and differences (e.g, %FPL thresholds) as specified by Connecticut. The eligibility determination will need to determine the specific Medicaid and CHIP coverage groups as defined by Connecticut.
2	T9.12		The system shall use the rules engine to implement non-Eligibility rules processing for Verifications, Workflow, portal-based intake, etc., where applicable.
2	T9.13		The system shall have rules execution that shall provide an output trace that is understandable by end users and that shows how values were calculated (e.g., cost sharing reductions) and eligibility determined or otherwise.

Level	#	Business Requirement	Requirement Description
2	T9.14		The system shall have a rules engine execution that shall provide an output trace or interactive debugger that can be used by expert staff to develop eligibility rules.
2	T9.15		The system shall be able to import and export rules into a common format that can also be read by a human.
2	T9.16		The isystem shall have a rules import/export format that shall be suitable for storage in the proposed source code management (SCM) system.
2	T9.17		The system shall have a rules engine that can support rules for multiple programs and agencies with appropriate security mechanisms to protect information.
2	T9.18		The system shall have a rules engine that shall have the ability to perform rules modeling and simulations.
1	T10	Privacy and Security	The system shall support control of access to sensitive functions and data including personal information.
2	T10.1	Security Architecture	
3	T10.1.1		The system shall implement a security architecture based on Medicaid Information Technology Architecture 3.0 (MITA 3.0) Security and Privacy model.
3	T10.1.2		The system shall comply with the following Federal and State security and privacy policies: 1. Health Insurance Portability and Accountability Act (HIPAA) http://csrc.nist.gov/publications/PubsFIPS.html 2. Health Information Technology for Economic and Clinical Health Act of 1996 3. Privacy Act of 1974 4. Patient Protection and Affordable Care Act (ACA) of 2010, Section 1561 5. Safeguarding and Protecting Tax Returns and Return

Level	#	Business Requirement	Requirement Description
			Information (26 U. S. C. 6130 and related provisions) 7. National Institution of Standards & Technology (NIST) Special Publications. NIST's Special Publications are available at: http://csrc.nist.gov/publications/PubsSPs.html 8. National Security Agency (NSA) Security Recommendation Guides 9. BEST security standards
3	T10.1.3		The system services and infrastructure shall use open security standards and frameworks such as: 1. Policy: WS-Policy, WS-Trust, WS-Privacy, Security Assertion Markup Language (SAML), Enterprise Privacy Authorization Language (EPAL) 2. Federation: WS-Secure Conversation, WS-Federation, WS-Authorization, XML Key Management (XKMS) 3. Mechanism: Extensible Access Control Markup Language (XACML), XML Encryption, XML-Digital Signatures, Extensible rights Markup Language (XrML)
3	T10.1.4		The system shall implement appropriate security architecture and controls to address various security attacks such as Spoofing, Tampering, Repudiation, Information (disclosure), Denial (of service), Elevation (of privilege) (STRIDE).
3	T10.1.5		The system Internal (trusted network) and external users shall have physically separated clusters of web servers.
3	T10.1.6		The system access by external users shall be via a proxy server located in a DMZ.
3	T10.1.7		The system shall have only a select number of ports opened on the firewalls and this shall only allow HTTP and HTTPS traffic. The number of open ports shall be verified for accuracy.
3	T10.1.8		The web servers, security servers, etc., shall not be located in the DMZ. The configuration and placement of all servers should be tiered in line with standard BEST topology guidance.

Level	#	Business Requirement	Requirement Description
2	T10.2	Directories	
3	T10.2.1		The system shall use LDAP compliant authentication service(s) for user authentication.
3	T10.2.2		The system shall share the DSS OpenLDAP directory for external users.
3	T10.2.3		The system shall use the State ActiveDirectory for internal users.
2	T10.3	Authentication	
3	T10.3.1		The system shall implement the Public Key Infrastructure (PKI) that follows standard practices such as the use of accepted Certification Authorities (CA), documented Certificate Policies (CP), and Certificate Practice Statements (CPS) which will include key escrow strategy. Implementation shall use fundamental technical standards such as X.509 certificate format and Public Cryptographic Standards (PKCS). The PKI used across entities shall address interoperability requirements.
3	T10.3.2		The system shall allow users to modify their own personal information/profiles including names and any Static Knowledge Based Authentication questions.
3	T10.3.3		The system shall maintain a history of security profile assignments for a User.
3	T10.3.4		The system shall automatically log, and disable access to any user accounts following a specified, administrator configurable number of unsuccessful log-on attempts.
3	T10.3.5		The system shall encrypt any passwords stored in the system.
3	T10.3.6		The system shall enforce standards for password rules when passwords are first setup (portal intake) or changed.

Level	#	Business Requirement	Requirement Description
3	T10.3.7		The system shall allow users to change their passwords.
3	T10.3.8		The system shall allow administrators to reset end user's passwords.
3	T10.3.9		The system shall allow password reset for external users to be supported using knowledge based authentication.
3	T10.3.10		The system shall require users to update their password after a time period designated by the Exchange.
3	T10.3.11		The system shall ensure Single Sign On between the HIX Web portal and the DSS Eligibility portal.
3	T10.3.12		The system shall support including CAPTCHA type functionality to discern people from systems during an individual's account setup. This should support visual and aural implementations. The Exchange may select to enable or disable this feature.
2	T10.4	Knowledge-Based Authentication (KBA)	
3	T10.4.1		The system shall allow Dynamic KBA to be used during a consumer's account setup process. This identity process shall ask a minimum of three (3) "out of wallet" questions to perform a knowledge based authentication process. If one question is answered incorrectly the solution shall ask two (2) supplemental questions. If more than one question is answered incorrectly then the email address and SSN shall be "quarantined" (i.e., no one can apply using these details) and the applicant shall enter a person-to-person process to free the application from quarantine and setup their account. The Dynamic KBAs could use external services, internal government databases or a combination. Many client may have little financial history and so a service that does not rely purely on credit is preferred or a service that can leverage other government data sources.

Level	#	Business Requirement	Requirement Description
3	T10.4.2		The system shall use Static KBA or Dynamic KBA to reset a password for an external user. If static KBAs are used then there shall be a minimum of two questions asked and these questions and answers shall be setup at start time.
3	T10.4.3		The system shall email a new password to the user for internal users.
2	T10.5	Authorization	
3	T10.5.1		The system shall display buttons, links and menus items if a user is not authorized to use the related function of page or portlet.
3	T10.5.2		The system shall confirm each request to the server to check that a user is not attempting to use a function of a page/portlet for which they are not authorized. This "course level" authorization shall be implemented by a commercial product layer that is in front of the application code.
3	T10.5.3		The system shall implement fine level authorization in code layers to provide field-level security.
2	T10.6	Privilege Management	
3	T10.6.1		The system shall allow a user to be assigned a security role.
3	T10.6.2		The system shall allow a security role to aggregate other security roles (hierarchy).
3	T10.6.3		The system shall allow a security role to be configured and specifies access to portlets, pages, reports and notice types.
3	T10.6.4		The system shall specify privileges for multi-function portlets and pages the precise function, e.g., insert, update, view and delete.

Level	#	Business Requirement	Requirement Description
3	T10.6.5		The system shall allow permissions to be specified once if the system has an internal and external security layer.
2	T10.7	Encryption (Message Encryption)	
3	T10.7.1		The system shall implement data encryption mechanism for sensitive data in transit. Data shall be encrypted to protect data confidentiality and integrity as appropriate based on the sensitivity of data. FTI shall be encrypted based on IRS guidelines. If encryption is not used for FTI data, appropriate compensating security mechanism shall be in place such as switched Virtual Local Area Network (VLAN) etc.
3	T10.7.2		The system shall implement data encryption mechanism for Servers or server storage containing PHI or PI and shall have sufficient administrative, physical, and technical controls in place to protect that data, based upon a risk assessment/System security review, or shall be encrypted using FIPS 140-2 validated Software
3	T10.7.3		The system shall implement data encryption mechanism for all electronic files that contain PHI or PI data and shall encrypt using FIPS 140-2 validated software when stored on any removable media or portable device (i.e., USB thumb drives, floppies, CD/DVD, Blackberry, backup tapes, etc.)..
2	T10.8	Electronic Signatures	
3	T10.8.1		The system shall accept electronic signatures as per Connecticut law.
3	T10.8.2		The system shall have the capability to accept telephonic signatures. Signature shall be stored in a repository and linked to the appropriate event/task. The workflow shall generate a user task to confirm the signature prior to storage.

Level	#	Business Requirement	Requirement Description
2	T10.9	Audit	
3	T10.9.1		The system shall be configurable so that it can log security events (including details such as date and time, the user id, the application server IP, the originating IP) such as: 1. Logon 2. Logon failure 3. Logoff 4. Timeout logoff 5. Password resets 6. Password requests/resets
3	T10.9.2		The system shall allow authorized personnel to view all security audit logs.
3	T10.9.3		The system shall be configurable to generate notifications (text message and email) for conditions that violate security rules. At a minimum: 1. Unauthorized access attempts on data and System function 2. Logon attempts that exceed the maximum allowed 3. Termination of authorized sessions after a specified time of no activity
3	T10.9.4		The system shall provide security incident reporting and mitigation mechanisms, including at a minimum: 1. Generate warning or report on System activity based on security parameters 2. Terminate access and/or generate report when potential security violation detected 3. Preserve and report specified audit data when potential security violation detected
2	T10.10	General Privacy and Security	

Level	#	Business Requirement	Requirement Description
3	T10.10.1		The system shall use host-based Intrusion Prevention and/or Detection software (IPS/IDS).
3	T10.10.2		The system shall include logic or a strategy to prevent SQL Intrusion attacks.
3	T10.10.3		The vendor shall include the services of an experienced and independent third party organization to validate that the system cannot be hacked, i.e., it has been both designed well and there are no implementation vulnerabilities
3	T10.10.4		The system shall perform a comprehensive security assessment and confirmation on an annual basis. This audit shall be performed by an experienced and independent firm.
3	T10.10.5		The system shall install security patches and upgrades shall be promptly applied on all equipment.
2	T10.11	Intrusion Management	
3	T10.11.1		The system shall use a security component to identify unusual user behavior (e.g., IP addresses in different countries, sudden change in IP addresses, anonymous IP addresses) and either prevent access or require the user to answer their personal security questions (i.e., confirm themselves).
2	T10.12	Malware and Virus Protection	
3	T10.12.1		The system shall scan documents and images (e.g., Web uploads) for malware and virus contents.

Level	#	Business Requirement	Requirement Description
3	T10.12.2		The system shall prevent, detect, and recover from malicious code.
1	T11.1	Data Management	The system shall enable management of enterprise data including operational and aggregate data and the transformation of data for use by different systems.
2	T11.1.1	Database Management	
3	T11.1.1.1		The system shall use a Relational Database Management System (RDBMS) to support OLTP.
3	T11.1.1.2		The system shall allow referential integrity enforcement to be enabled in the OLTP database unless there is an exception scenario that is approved by the Exchange.
2	T11.1.2	Data Warehousing / Reporting	
3	T11.1.2.1		The system shall have a separate database that is optimized for reporting. The database shall be isolated from the production OLTP database so that the performance of one does not impact the performance of the other.
3	T11.1.2.2		The system shall allow a reporting database that minimally includes data from: 1. The OLTP database 2. Data from any ancillary databases, e.g., any decoupled CRM system 3. Any telephone tracking logs 4. Operational data from inbound document processing
3	T11.1.2.3		The system shall include a reporting database that is no more than 24 hours behind the main OLTP database.
1	T11.2	OLTP Data Model	The data model for the OLTP implementation shall be normalized and perform well under heavy transaction loads. This is in contrast to the data warehouse that can

Level	#	Business Requirement	Requirement Description
			afford to be de-normalized and can be restructured to simplify common reporting constructs.
3	T11.2.1		The system shall allow the physical OLTP data model to be normalized appropriately.
3	T11.2.2		The system shall allow the physical database to be described in a data dictionary with the usage, associated business rule and semantic information for the tables and columns.
3	T11.2.3		The system shall allow the data model to follow consistent and logical naming standards that are fully documented.
3	T11.2.4		The system shall allow data elements the track the created-by, creation timestamp, last-updated-by and last-update timestamp.
1	T11.3	Eligibility Data	All client and household data that affects eligibility shall be effective dated and versioned.
3	T11.3.1		The system shall allow eligibility data elements to be effective dated.
3	T11.3.2		The system shall allow eligibility data elements to be versioned so that for a given effective date it is possible to see or use the different versions of a data element.
3	T11.3.3		The system shall allow eligibility data elements to track whether they have been verified (including auto-verified by Attestation) or approved.
3	T11.3.4		The system shall allow eligibility data elements to capture the timestamp or date-time of when the data was entered and the timestamp or date-time of when the data was updated (only one timestamp is absolutely necessary for tables that are strictly versioned, i.e., when every logical update results in the insert of a new row).
3	T11.3.5		The system shall allow eligibility data elements to capture the identifier of the person (internal or external user) or program or source system (e.g., the federal hub) that provided the data element value or that changed the data

Level	#	Business Requirement	Requirement Description
			element (only one identifier is absolutely necessary for tables that are strictly versioned, i.e., when every logical update results in the insert of a new row).
3	T11.3.6		The system shall allow eligibility data elements to have a logical link to the types of verification item (e.g., a drivers license) that can be used to verify that type of data element. The list shall support the verification types of "Attestation" as well as named system interfaces, e.g., "CCIIO Hub", and "SSA".
3	T11.3.7		The system shall allow an eligibility data element to track what was specifically used to verify that data element and when it was captured, e.g., a drivers license. This verification element shall similarly support attestation and named system interfaces.
3	T11.3.8		The system shall allow the captured verification data to include references to any actual verification images in the document repository.
3	T11.3.9		The system shall allow the captured verification data to include the details of the system interface values, e.g., the actual income value from the federal hub.
3	T11.3.10		The system shall allow the verification data model to specify the acceptable tolerances on a value, e.g., if an individual states their income as $404 but the IRS income was indicated as $402 then the system could be configured to consider this to be within a tolerance and so a reasonable (although not perfect) and acceptable verification.
1	T11.4	Rule Data	Eligibility rules, rule reference data, rate data and rule parameters shall be effective dated.
3	T11.4.1		The system shall allow production rules to be effective dated and so make it possible to run eligibility on historical data using different historical rules.
3	T11.4.2		The system shall allow parameter data that is used in eligibility processing (e.g., federal poverty levels by household size, and the maximum age of a child) to be

Level	#	Business Requirement	Requirement Description
			held in database tables. These tables shall be effective dated so that different values can be recorded over time. The system shall support singleton values and tables (matrix) of values (e.g., FPL by household size).
1	T11.5	Lookup Data	Lookup data is simple data that can have a code and/or a sequence number identifier and a longer textual description. Lookup data can appear in drop lists on screens or in selection lists or as lists in notices.
3	T11.5.1		The system shall allow data to typically be displayed on a screen or in a notice sorted alphanumerically (in the chosen language).
3	T11.5.2		The system shall allow the alphanumerical sort order to be overridable, e.g., force USA to the top of a list of countries.
3	T11.5.3		The system shall allow the lookup data to indicate whether a user is able to select a particular value or whether it is only selectable by a system process.
3	T11.5.4		The system shall allow the lookup data to be logically deletable or end-datable so that a value no longer appears as an option in a drop list except if that value was previously selected on an existing data element.
3	T11.5.5		The system shall allow lookup data to be multi-lingual.
1	T12	Information Management	The system shall facilitate the collection and analysis of enterprise data and the generation of reports and graphs.
2	T12.1	Reports	
3	T12.1.1		The system shall support both ad hoc and scheduled reports.
3	T12.1.2		The system shall include an easy to use tool set and simplified database structures to support the development of ad hoc reports by end users.

Level	#	Business Requirement	Requirement Description
3	T12.1.3		The system shall develop reports with input and selection parameters so that end users can run the same report but with a different targeted scope.
3	T12.1.4		The system shall run reports that are designed with best practices so that they include visual elements (graphs and charts), summary pages and drill-down details.
3	T12.1.5		The system shall allow authorized users to sort and group report data by the data parameters provided within the reports.
3	T12.1.6		The system shall allow reports to be structured so that they can be viewed online without requiring large downloads. A report shall not require more than 1 minute to download.
3	T12.1.7		The system shall allow the reports and report contents to be saved and exportable to different formats including Excel and PDF.
3	T12.1.8		The system shall initially produce up to 100 pre-built standardized reports. The system shall include all reports as required by State and Federal regulations and legislation. If the Exchange is unable to identify all 100 pre-built reports prior to the prodcution implementation, as the business operations model is new, then the vendor should be prepared to deliver these during any maintenance period without using resources already allocated to the maintenance effort.
3	T12.1.9		The system shall allow authorized users general querying capability to extract data sets.
3	T12.1.10		The system shall allow authorized users to define the frequency and method of report delivery.
3	T12.1.11		The system shall allow for sending of reports via e-mail.
3	T12.1.12		The system shall keep historical versions of the standard reports available for online viewing.

Level	#	Business Requirement	Requirement Description
2	T12.2	Dashboard	
3	T12.2.1		The system shall include a management and executive dashboard. This dashboard could be the homepage content of a user or accessible from the home page.
3	T12.2.2		The system shall include dashboard content which shall be agreed during the project but may include summary tabular content and visual representation (graphs, bar charts, etc.) The dashboard shall show trends of key performance indicators on a day, week, month and yearly basis.
2	T12.3	Surveys	
3	T12.3.1		The system shall be able to publish surveys that citizens can complete online from within the Web portal. The survey tool could be a function of the core product, a third-party add-on or an external (SaaS/Cloud) service.
3	T12.3.2		The system shall support different surveys being targeted at different users and included at different points in the Web site, e.g., from the home page or after completing QHP enrollment.
3	T12.3.3		The system shall allow survey results to be aggregated and presented in reports.
2	T12.4	Archive and Purge	
3	T12.4.1		The system shall include archive and data purge capabilities for the major data records, user accounts, etc..
3	T12.4.2		The system shall include an online Web pages that can configure and suspend/resume archive and purge activities. Configuration parameters shall include, but not be limited to: 1. "Older than" dates for individuals no longer active on the system

Level	#	Business Requirement	Requirement Description
			2. Idle/abandoned accounts and applications
1	T13	Financial Transaction Processing	The system shall interface with premium billing and collection entities.
2	T13.1	Financial Transaction Processing	
3	T13.1.1		The system shall have "reconcilliation" interfaces that collect the details of premium invoicing amounts (including details such as premimum tax credits and cost sharing reductions) and the payment status. These interfaces shall be built to communicate with the SHOP outsourcing organization and the entity or entities performing consumer billing (either a third party BPO billing organization or the QHP Issuers - to be decided)
3	T13.1.2		The system shall create invoices (electronic or paper) if necessary in order to collect self-sustaining charge backs from the issuers or third-party biller, and SHOP outsourcer.
3	T13.1.3		The system shall accept and track (self-sustaining) payments from the QHP Issuers or third-party biller, and third-party SHOP outsourcer.
1	T14.1	IT Operations	The system shall accommodate hosting, backup and disaster recovery requirements.
2	T14.1.1	Data Center Hosting	The production system shall be hosted at the BEST data center and must meet BEST standards.
2	T14.1.2	Disaster Recovery	The system shall be compatible and tested/proven to meet BEST requirements.
2	T14.1.3	Backup	The system shall be compatible and tested/proven to meet BEST requirements.
2	T14.1.4	Help Desk	BEST will provide data center IT help desk support. The vendor shall provide tier II support for this help desk.

Level	#	Business Requirement	Requirement Description
1	T14.2	Environments	The system shall need multiple environments to support development, testing, training, production, etc.
2	T14.2.1	General Environment Requirements	
3	T14.2.1.1		The system shall use virtualization software to separate environments and create flexibly sized servers.
3	T14.2.1.2		The system shall prevent the use of live production data in a non-production environment.
3	T14.2.1.3		The system shall provide tools to automate the migration of code, configuration, security, and data between environments.
2	T14.2.2	Development Environment	
3	T14.2.2.1		The system shall be hosted by the Systems Integration vendor. The environment must be secure and backed-up.
2	T14.2.3	System Test Environment	
3	T14.2.3.1		The system shall be hosted by the Systems Integration vendor.The environment must be secure and backed-up.
2	T14.2.4	Training Environment	

Level	#	Business Requirement	Requirement Description
3	T14.2.4.1		The system shall be hosted by the Systems Integration vendor.The environment must be secure and backed-up.
2	T14.2.5	Scalability Test Environment	
3	T14.2.5.1		The system shall be hosted by the Systems Integration vendor.The environment must be secure and backed-up.
2	T14.2.5	User Acceptance Testing (UAT) Environment	
3	T14.2.5.1		The system shall be hosted by BEST. The system shall mirror exactly, although the servers may possibly be smaller in size, the production configuration.
2	T14.2.6	Staging Environment	
3	T14.2.6.1		The system shall be hosted by BEST. The equipment cost should be included in the vendor's proposal.
2	T14.2.7	Production Environment	
3	T14.2.7.1		The system shall be hosted by BEST. The equipment cost should be included in the vendor's proposal.

Level	#	Business Requirement	Requirement Description

Level	#	Business Requirement	Requirement Description

Level	#	Business Requirement	Requirement Description

Level	#	Business Requirement	Requirement Description
2	T14.2.8	Production Disaster Recovery (DR) Environment	

Level	#	Business Requirement	Requirement Description
3	T14.2.8.1		The system shall be hosted by BEST. The equipment cost should be included in the vendor's proposal.

APPENDIX H – DELIVERABLES REQUIREMENTS

Level	#	Business Requirement	Requirement Description
1	D1	Initiation, Concept, and Planning	
2	D1.1	Work Plan	
3	D1.1.1		The Proposer shall prepare a Work Plan in Microsoft Project format, be submitted within 30 days of the contract start date and include, at a minimum, the following information: A) Overall schedule with design and implementation phase B) All major tasks, deliverables, and milestones with start and end dates, duration in days and predecessor and successor dependencies C) All deliverable review and approval timeframes D) A Gant chart view showing all major tasks, deliverables and milestones E) A critical path view showing critical path major tasks, deliverables and milestones F) Proposer and State resources assigned to each major task.

Level	#	Business Requirement	Requirement Description
3	D1.1.2		At a minimum, the Work Plan deliverable must contain the following: A) Work Breakdown Structure (WBS), which explicitly aligns with the project scope B) Major project phases, including software releases C) Start and end dates D) Task dependencies E) Task durations must be divided into components of a manageable size, i.e., generally no less than 20 hours and no more than 80 hours of effort. F) Identification of critical path tasks G)Identification of deliverables H)Key milestones, including expectations of State participation, approval points and deliverable reviews by State I) Resource allocation by project phase that represents a realistic and achievable work-resource allocation, including State resource participation requirements J) Assumption of full-time equivalency K) Schedule constraints
2	D1.2	Resource Plan	
3	D1.2.1		Prior to the start of project activities, the System Integrator will present to the State the Resource Plan that will be utilized to manage the System Integrator resources that are part of the project. This plan should describe in detail the proposed approach and methodology that the System Integrator plans to use to assure actual delivery of staff, particularly key staff, with the right skills and experience per schedules agreed with the State, in a way that meets the needs of the State, and ensures a successful project completion.

Level	#	Business Requirement	Requirement Description
3	D1.2.2		At a minimum, the Resource Plan deliverable must contain the following: A) Organizational Chart B) Resource Management Approach C) Key Personnel Skill Set D) Skill Gap Plan E) Resource Loading Chart F) Resource Transition and Replacement G) Resource Assumptions and Constraints
2	D1.3	Project Management Plan	
3	D1.3.1		Prior to the start of project activities, the System Integrator will present to the State the Project Management Plan that will be utilized to manage the various activities and deliverables that are part of the project. This plan should describe in detail the proposed approach and methodology that the System Integrator plans to employ to control all project activities and deliverables. The Project Management Plan would provide a detailed description of the management and technical approach provided in the proposal response.
3	D1.3.2		At a minimum, the Project Management Plan deliverable must contain the following: A) Project charter including goals, objectives, milestones, and needed resources B) Key stakeholders C) Integration Management approach D) Risk Management approach E) Scope Management approach F) Schedule Management approach G)Cost Management approach H)Communication Management approach I) Human Resource Management approach J) Quality Management approach K) Procurement Management approach

Level	#	Business Requirement	Requirement Description
			L) Document Management, Control, and Storage process
2	D1.4	Deliverable Planning and Expectation Process	
3	D1.4.1		The System Integrator is required to develop a Deliverable Expectation Document (DED) for all project deliverables and work products. The System Integrator must provide a DED to the State which describes the planned elements for the deliverable at least ten (10) business days before its submission. The State will need to review and approve the deliverable expectation document within agreed timeframes.

Level	#	Business Requirement	Requirement Description
3	D1.4.2		Each DED shall present an overview and outline of the associated Deliverable. The DED shall contain at a minimum the following information: A) Introduction B) Schedule that reflects all Proposer draft and final submittal dates, and State review and approval dates C) Requirements associated with the deliverable D) Approach for Deliverable development E) Deliverable Outline F) Proposer resources responsible for development and State and QA resources responsible for Review. G) Assumptions H) Acceptance Criteria I) DED Approval
2	D1.5	Monthly Status Reports	
3	D1.5.1		The System Integrator is required to send monthly status reports to the PMO throughout the duration of the contract. Within the report, the System Integrator should document project risks and issues encountered for PMO review.
3	D1.5.2		The System Integrator shall prepare Monthly Status Reports to include at a minimum: A) Summary of overall progress B) Key tasks, deliverables and milestones completed during the applicable period. C) Team progress/status summaries D) Upcoming key tasks, deliverables and milestones for the next period E) Issues F) Risks G) Remediation Tactics H) Action Items
2	D1.6	Release Plan	

Level	#	Business Requirement	Requirement Description
3	D1.6.1		The System Integrator is required to document all of the activities, resources and responsibilities related to a particular software release, including the scheduling of that release.
3	D1.6.2		The Release Plan deliverable shall describe the system functionality that will be developed and implemented in each release, and the rationale for each release.
2	D1.7	Application Development Plan	
3	D1.7.1		The System Integrator will provide an Application Development Plan (ADP) that documents the System Development Lifecycle (SDLC) phases to be leveraged on the project, the necessary application development process tasks and activities, work products, functional and technical design standards, coding standards and tools to be used to effectively build and test the system.
3	D1.7.2		The State is expecting the System Integrator's life cycle development approach to use the CMS Life Cycle (ELC) as per CMS Guidance as a basis for System Development Life Cycle (SDLC). This model includes life-cycle phases and transition stage gate reviews for such items as business service descriptions/definitions, requirements, system design specifications, data models, interface control documents, and integration test cases.

Level	#	Business Requirement	Requirement Description
3	D1.7.3		At a minimum, the Application Development Plan deliverable must contain the following: A) Development Standards and Guidelines B) System Development Lifecycle (SDLC) approach including: i) Requirements Validation ii) Design iii) Development iv) Testing v) Implementation vi) Maintenance vii) Establishment Reviews viii)Exchange Certification C) Roles and Responsibilities D) Tools, Environment and Infrastructure E) Baseline Deliverables and Work Products
2	D1.8	Configuration Management Plan	
3	D1.8.1		The System Integrator will provide a Configuration Management Plan (CMP) to document the approach and processes for managing and versioning configuration items created during development, implementation and maintenance phases of the system.
3	D1.8.2		The code management and migration procedures within the Configuration Management Plan shall describe the tools and techniques that will be used for managing the various environments and controlling the migration of code through proper approvals and authorizations, as well as defining those approvals and authorizations.

Level	#	Business Requirement	Requirement Description
3	D1.8.3		At a minimum, the Configuration Management Plan deliverable must contain the following: A) Scope and Approach B) Roles and Responsibilities C) Description of Configuration Items D) Configuration Naming Standards E) Configuration Management Tool F) Access controls established within the tool G) Processes and procedures for creating development work streams, check-in, check-out procedures H) Procedures for integrating with the Integrated Development Environment (IDE) I) Migration procedures and checklists J) Source code backup and recovery procedures K) Process for periodic configuration reviews L) Configuration reporting requirements
2	D1.9	Federal Review Gate Packages	
3	D1.9.1		The System Integrator shall assist the State in preparing for and conducting the Federal Reviews and any other federal agency reviews required to monitor the system development or obtain system certification(s) and approvals, maintain current knowledge of federal system review and/or certification requirements, comply with federal review guidelines, provide updated artifacts to support federal reviews, provide support as needed during a review, or assist the State with review, assessment and response to any deficiency found during reviews.

Level	#	Business Requirement	Requirement Description
3	D1.9.2		The System Integrator shall prepare documentation for submission to the federal government to support federal review(s) and approval of the Health Insurance Exchange and Integrated Eligibility solution. The System Integrator will provide federal review and monitoring information packages, which documents information to support federal review and monitoring activities. The review and monitoring package will be used to help ensure a successful review of the new CT HIX and Integrated Eligibility solution.
3	D1.9.3		At a minimum, the Establishment Reviews Packages deliverable must contain the following: • Planning Review • Design Review • Implementation Review. In addition, the System Integrator will support and provide assistance with any state and federal audits and certifications as required.
1	D2	Requirements, Analysis and Design	
2	D2.1	Requirements Validation and Prioritization Plan	
3	D2.1.1		As part of the initial Functional Design activities, the System Integrator will review and assess the original requirements provided as part of this Statement of Work. The System Integrator will work with the State to determine the priority of development activities related to those requirements.

Level	#	Business Requirement	Requirement Description
3	D2.1.2		The System Integrator will present the Requirements Validation and Prioritization Plan approach for validating and prioritizing the requirements. The System Integrator should also provide a process for modifying and integrating new requirements that the State identified during the period between requirements finalization and the System Integrator's start date. As well, the System Integrator must develop a process that allows for ongoing flexibility with regard to system requirements in light of the unstable regulatory climate.
3	D2.1.3		At a minimum, the Requirements Validation and Prioritization Plan deliverable needs to contain the following: A) Requirements gathering standards and guidelines B) Approach for meeting with key stakeholders to validate and prioritize existing requirements C) Approach for documenting new requirements and updating old requirements D) Validated requirements documentation
2	D2.2	Integrated Requirements Plan	
3	D2.2.1		After the Requirements Validation and Prioritization process is complete, the requirements would need to be elaborated at a more detailed level to facilitate design activities. The System Integrator would review the contents of the requirements documentation with the key stakeholders to review and elaborate as necessary in the Integrated Requirements Plan.
3	D2.2.2		At a minimum, the Integrated Requirements Plan deliverable would contain the following: A) Elaborated/updated requirements documentation B) Description of the approach for establishing traceability through design, development and testing mapped back to the baseline requirements
2	D2.3	Business Systems	

Level	#	Business Requirement	Requirement Description
		Design	
3	D2.3.1		Once a finalized requirements plan is in place, the System Integrator shall undertake a design process in-line with its SDLC as described within its contract, and elaborated and confirmed in the Application Development Plan.
3	D2.3.2		At a minimum, the Business Systems Design deliverable would contain the following: A) Approach used for the completion of Joint Application Design (JAD) sessions i) Identification of stakeholders ii) Approach for carrying out JAD sessions iii) Walkthroughs conducted iv) Meeting notes from JAD sessions v) Outcome of JAD sessions B) Proposed screen layout/design prototypes C) Business rules/exceptions D) Required fields/Data elements E) Workflow F) Identification of reports G) Description of the source and the target systems H) Design considerations for interfaces, conversion, testing, training and implementation I) Design considerations for user groups, roles and security
2	D2.4	Organizational Readiness Plan	
3	D2.4.1		The System Integrator will perform an organization readiness analysis and document this analysis in the Organizational Readiness Plan. This plan will assess the ability of the State to implement its new system.
3	D2.4.2		The Organizational Readiness Plan would contain both an analysis of required implementation capabilities and a plan for remediating any gaps.

Level	#	Business Requirement	Requirement Description
3	D2.4.3		It is expected that the System Integrator would work with the State to identify, discuss, and assess the level of effort necessary to prepare the agency for implementation. The System Integrator would describe within the Organizational Readiness Plan how they are going to assess the organization's readiness for implementation.
3	D2.4.4		At a minimum, the Organizational Readiness Plan deliverable would contain the following: A) Identification of affected stakeholders B) Assessment of stakeholder awareness of the new system C) Assessment of conversion readiness D) Assessment organizational readiness, including: i) Required training curriculum and capacity to deliver training ii) Impact to policies and procedures iii) User computer skills iv) Communication/governance v) Labor/union readiness E) Assessment of dependencies on other organizations F) Gaps identified as a result of the assessments G) Plan for addressing the gaps
2	D2.5	System Architecture Design Document	
3	D2.5.1		As an output of the requirements validation and business design activities, the System Integrator would document the proposed system architecture. The architecture documentation would include both a graphical and narrative depiction of the end state Integrated Eligibility and HIX solutions and all ancillary interfaces, etc. This deliverable would also describe the security model utilized for the system.

Level	#	Business Requirement	Requirement Description
3	D2.5.2		At a minimum, the System Architecture Design Document deliverable would contain the following: A) Application Architecture i) Technology used and patterns utilized ii) Existing State capabilities leveraged vs. built iii) Frameworks utilized iv) Business layer, User Interface layer, Integration layer and Interface layer architecture details v) Logical software architecture vi) Data architecture B) Hardware and Execution Architecture i) Runtime architecture a) Runtime environment b) Deployment model c) Runtime software ii) Network architecture a) Network layout for deployment and execution iii) Security architecture a) Network security C) Identification/description of links with the database structure diagram D) Identification/description of the identified interfaces
2	D2.6	Conceptual Data Model	
3	D2.6.1		The System Integrator will create a Conceptual Data Model which describes the high-level data entities, relationships, key attributes and appropriate subject areas.
3	D2.6.2		At a minimum, the Conceptual Data Model deliverable must contain the following: A) General conceptual data entity definition B) Pictorial depiction of conceptual data entities and relationships between entities C) Mapping between subject area and conceptual data entities

Level	#	Business Requirement	Requirement Description
			D) Data classification of conceptual data entities
2	D2.7	Logical Data Model	
3	D2.7.1		The System Integrator is required to provide a representation of the organization's data organized in terms of entities and relationships and is independent of any particular data management technology.
3	D2.7.2		The System Integrator must include in the Logical Data Model deliverable a definition of a common understanding of business data elements and inter-relations to form the basis for physical database design.
1	D3	**Technical Design**	
2	D3.1	Technical Design	

Level	#	Business Requirement	Requirement Description
3	D3.1.1		At a minimum, the Technical Design deliverable would contain the following: A) Detailed description of the processing logic involved in each component of the process flow B) Unified Modeling Language (UML) documentation for technical design including Class and Sequence Diagrams C) Business Object Layer implementation details including Java Classes and methods D) Data Object Later implementation details including an Entity Relationship Diagram (ERD) E) Presentation Layer implementation details including: i) User Interface Meta-Data (UIMs) ii) VIMs (UIM View) iii) JavaScript iv) CSS v) System Actions/Server Interfaces F) Security Groups and Customization of "Out of the Box" (OOTB) functionality G) Details on required changes in system code and/or database H) Default users and groups I) Necessary configuration J) Create a "Create, Retrieve, Update, Delete (CRUD) matrix" for tables affected as a part of the current design K) Confirm data integrity controls, security controls, and document controls are met L) Create a document which describes the steps needed to completely convert and migrate data to the production environment
2	D3.2	Interface Control Document	
3	D3.2.1		The System Integrator is responsible to describe the interface or interfaces to the system being implemented.

Level	#	Business Requirement	Requirement Description
3	D3.2.2		At a minimum, the Interface Control Document deliverable would contain the following: A) Inputs and outputs of a single system/services B) Interface between any two systems/services, or the interface protocol between physical components
2	D3.3	Physical Data Model	
3	D3.3.1		The System Integrator is required to provide a representation of a data design which takes into account the facilities and constraints of the proposed database management system.
3	D3.3.2		At a minimum, the Physical Data Model deliverable would contain the following: A) Database entities/tables/views/attributes/columns/fields B) Relationship between entities influenced by database performance, indexing, storage, and denormalization
2	D3.4	Security Plan	
3	D3.4.1		The System Integrator would assist the State in identifying all relevant standards (including Federal, State, and Local laws and regulations) based on the functionality being deployed and would be responsible for developing a security plan. The plan would describe how the System Integrator will comply with Enterprise Security Standards.

Level	#	Business Requirement	Requirement Description
3	D3.4.2		At a minimum, the Security Plan deliverable would contain the following: A) Security approach B) Roles and responsibilities: System Integrator, State, User's, and shared C) Data Classification D) Integration with centralized Identity Management applications E) Integration with centralized Access Management applications F) Security controls framework G) Data encryption H) Security operations I) Compliance with applicable regulations J) Period security auditing i) Monitoring and vulnerability test procedures ii)Internal and external threats; risk analysis iii)Business continuity and incident response plans
2	D3.5	Data Conversion Plan	
3	D3.5.1		After the completion of testing, data from legacy systems would be converted to the new system. Conversion testing addresses the complete scope of data conversion including conversion from legacy systems. The Data Conversion Plan would address all data conversion requirements. The System Integrator would describe the conversion approach, plan and evaluation criteria and results.

Level	#	Business Requirement	Requirement Description
3	D3.5.2		At a minimum, the Conversion Plan deliverable would contain the following: A) A data conversion approach, including data cleanse activities and mock-conversions B) A Data Mapping document C) Plan to create conversion testing data D) An approach to create test scripts to test every data conversion requirement E) Document the creation of a conversion test environment F) Identify needed processes to support data conversion testing (same as production) G) Description of the steps needed to convert and migrate data to the production environment H) Identification of data integrity controls, security controls, and document controls
2	D3.6	Data Dictionary	
3	D3.6.1		The System Integrator would create a Data Dictionary which would include descriptions of the data objects, its origins and relationships to other data in a data model which could help the development of the system and others who may need this information.
3	D3.6.2		At a minimum, the Data Dictionary deliverable would contain the following: A) Create relationship diagrams of all data elements B) Document details of data elements (structure, length, etc.)
2	D3.7	Data Management Plan	
3	D3.7.1		The System Integrator is required to outline in the Data Management Plan document how the data will be handled during the System Integrator's research, and after the project is completed.

Level	#	Business Requirement	Requirement Description
3	D3.7.2		At a minimum, the Data Management Plan deliverable would contain the following: A) Strategy for managing data during and after project execution B) Identify data archiving/data retention plans
2	D3.8	Contingency/Recovery Plan	
3	D3.8.1		The System Integrator is required to create a Contingency/Recovery Plan document explaining how the design mitigates the risk of system and service unavailability by focusing on effective and efficient recovery solutions.
3	D3.8.2		The System Integrator is to document in the Contingency/Recovery Plan the management policies and procedures to maintain or restore business and technical operations in the event of emergency, system failure, or disaster.
2	D3.9	Privacy Impact Assessment	
3	D3.9.1		The System Integrator must create a Privacy Impact Assessment document to summarize the application's logical and physical implementation from a security perspective. The document will allow the State team to review the business, data and security controls that have been implemented to protect application data that is at rest or in transit. It must include an architectural analysis comprising business, functional and data components, a review of both the logical and physical architecture and database schema, and a risk model detailing the risks that may affect the application.

Level	#	Business Requirement	Requirement Description
3	D3.9.2		At a minimum, the Privacy Impact Assessment deliverable would contain the following: A) Architectural analysis for business, functional, data and architectural views B) Architectural topology depicting logical architecture view, inter application dependencies and database view C) Security controls for authentication, authorization, data protection and audit D) Physical architecture depiction of infrastructure and protocols used E) Risks to the confidentiality and integrity of the data
1	D4	**Development and Test**	
2	D4.1	Completion of all Code Modules	
3	D4.1.1		The System Integrator will migrate all system modules into a staging environment. The completed code will be subject to a code review by the State to assess completeness and conformance to project and industry standards. The State plans to administer user acceptance testing, but the System Integrator will have to track and facilitate resolution of issues uncovered during user acceptance testing.
3	D4.1.2		At the end of the development lifecycle, the System Integrator will develop a Completion of all Code Modules document and validate that all code modules necessary for implementation are completed.
3	D4.1.3		At a minimum, the Completion of all Code Modules deliverable would contain the following: A) Confirm code modules for all State requirements are developed B) Confirm that developed modules have completed the test cycle C) Confirm that developed modules have met all exit criteria

Level	#	Business Requirement	Requirement Description
			D) Confirm that developed modules have met scenarios established within the Test Results Summary Document
2	D4.2	Automated Code Review Results	
3	D4.2.1		The System Integrator shall provide an Automated Code Review Results document with results from development code reviews that inspect for software security vulnerabilities.
2	D4.3	Test Plan	
3	D4.3.1		The System Integrator would be responsible for the planning and execution of unit, system, performance (both stress and volume), security, regression and integration testing. The System Integrator would also provide user testing and training environments and provide required support such as error logging, bug fixing, and troubleshooting. The test plan will include the test cycle, test scripts, conditions, a plan for test data creation, and expected results definition for each test phase. The scope of the testing would address all detailed requirements developed and follow the test cases developed by the System Integrator for the system.

Level	#	Business Requirement	Requirement Description
3	D4.3.2		At a minimum, the Test Plan deliverable would contain the following: A) Details on testing approach B) Details of pretest preparations, including use of federal test data (IRS, etc.) C) Descriptions of tests to be performed D) Test scripts i) Tester Action ii) Expected results iii) System response iv) Total steps passed v) Total steps failed E) Tools planned for testing, including a description of the automated software testing approach F) Descriptions of the standards and reviews used during testing, including procedures for retesting G) Roles and responsibilities of testing team H) Metrics to evaluate progress and success of the testing I) Acceptance criteria for the completion of each phase of testing J) Procedure for reporting and resolving defects including performance metrics and trend analysis, to track the progress of software testing and defect resolution K) Plans for infrastructure testing (including backups, failure, and other system and hardware) L) Testing environment plans and specifications
2	D4.4	Test Results Summary Document	
3	D4.4.1		The System Integrator would document the results of all testing areas identified within the Test Plan in the Test Results Summary Document.

Level	#	Business Requirement	Requirement Description
3	D4.4.2		At a minimum, the Test Results Summary Document deliverable would contain the following: A) Test scenario and expected results B) Pass/fail status C) Open items/Outstanding issues D) Retests planned E) Items deferred for future phases
2	D4.5	Operations and Maintenance Manual	
3	D4.5.1		The System Integrator will create an Operations and Maintenance Manual (e.g., Runbook) to capture procedures, and technical infrastructure to maintain the State system. It would also contain descriptions for handling exception scenarios/conditions, and incidents. The runbook would be written in a manner to allow experienced operators to effectively manage, troubleshoot and restore a system.
3	D4.5.2		At a minimum, the Operations and Maintenance Manual deliverable would contain the following: A) Description of technical infrastructure B) Procedures for Startup/Shutdown C) Procedures for Batch execution (nightly, weekly, monthly) D) System maintenance procedures E) Procedures for accessing servers/backups F) Procedures for restoring system configuration settings G) Procedures for system troubleshooting H) Procedures for exception handling
1	D5	**Implementation**	
2	D5.1	Training Plan	
3	D5.1.1		The Training Plan deliverable would need to describe the training approach and plan for each agency individually. The System Integrator would perform a readiness assessment for system users (internal and external) to

Level	#	Business Requirement	Requirement Description
			determine the degree and type of training that should be offered. The training plan should include estimates based on a "train-the-trainer" model.
3	D5.1.2		At a minimum, the Training Plan deliverable would contain the following: A) Identification all users to be trained (agency users and providers) B) Details on training approach C) Identification of training venue E) Define technology necessary for conducting training F) Identify experienced instructors G) Develop Training schedule H) Development of Training Curriculum and Materials
2	D5.2	Implementation Plan	
3	D5.2.1		The System Integrator would present a detailed Implementation Plan for the completion of activities for the State.
3	D5.2.2		At a minimum, the Implementation Plan deliverable would contain the following: A) Implementation impacts to the State as well as risks and opportunities B) User groups considered for implementation C) Proposed scope, approach, schedule and team D) Proposed implementation activities: i) On-site support and Remote Support approach ii) Implementation governance and organizational structure iii) Implementation communication activities iv) Change and stakeholder alignment activities v) Problem resolution and escalation procedures vi) Help desk and reporting procedures vii) Conversion readiness activities E) Define agency dependencies F) Implementation phase exit criteria

Level	#	Business Requirement	Requirement Description
			G) Implementation readiness approach (go/no-go criteria and checklist)
2	D5.3	Deployment Plan	
3	D5.3.1		The System Integrator would create a Deployment Plan document which details activities that need to be performed in order to deploy the application to the production environment for the State.
3	D5.3.2		At a minimum, the Deployment Plan deliverable would contain the following: A) Go/No-go checklists B) Software installation procedures C) Deployment strategy and approach D) Deployment/Conversion implementation detailed plan E) Post deployment activities
2	D5.4	Exchange Certification Application	
3	D5.4.1		The System Integrator is responsible for proving all required deliverables and work products to ensure successful certification and operation of the Connecticut Exchange.

Level	#	Business Requirement	Requirement Description	
3	D5.4.2		The System Integrator should document how it plans to ensure the State meets all legal requirements for successful operation of CT HIX in a certification application deliverable and demonstrate the CT HIX's actual ability to meet the federal standards and be ready to offer health care coverage on January 1, 2014.	
3	D5.4.3		At a minimum, the Exchange Certification Application deliverable would contain the following: A) Certification Application B) Operational Readiness Assessment In addition, the System Integrator will support and provide assistance with any state and federal audits and certifications as required.	
1	D6	**Final System Acceptance**		
2	D6.1	System Acceptance Document		
3	D6.1.1		The System Integrator is required to help ensure that the implementation of the new system to the clients satisfied all documented requirements and meets system expectations for functionality and quality.	

Level	#	Business Requirement	Requirement Description
3	D6.1.2		At a minimum, the System Acceptance Document deliverable would contain the following: A) Completion of required development activities B) Completion of all testing activities C) Completion of all conversion activities D) Completion of all rollout activities E) Completion of training activities F) Completion of all migration activities G) User Support process implemented H) Completion of all transition activities I) Completion of all launch support activities J)Completion of all project documentation K) Successful operation of the system in production for a period of 30 consecutive calendar days without any high or severe system incidents. The occurrence of a high or severe level incident will reset the system acceptance clock. L) Completion of ninety (90) days successful operations after final acceptance or six (6) months from the date of preliminary acceptance, whichever is later (Warranty Period)
2	D6.2	Operational Support Plan	

Level	#	Business Requirement	Requirement Description
3	D6.2.1		The scope of the launch support phase addresses the objectives, scope, approach, deliverables, technology/tools to be used, roles and responsibilities of the staff providing launch support (including Responsible-Accountable-Consult-Inform (RACI) responsibility matrix), resources needed, time frames, dependencies, assumptions, and risks and issues related to launch support.
3	D6.2.2		At a minimum, the Operational Support Plan deliverable would contain the following: A) Define and document all support activities related to production operations (Batch, back-up, print, interface, report schedules are in place, emergency change control, operational support, configuration management, generate status report of operational support and recommendations for improving operations) B) Resources and responsibilities for operational support C) Help desk incident support (troubleshooting and coding activities), and functional support to end-users D) Application, database, server, storage, storage area network (SAN), and network performance tuning procedures E) Security administration procedures F) Technology support for infrastructure and software, i.e., server, storage, database, etc. G) Establish change management procedure

Level	#	Business Requirement	Requirement Description
2	D6.3	Transition and Knowledge Transfer Plan	
3	D6.3.1		The Transition and Knowledge Transfer Plan would address the specific objectives, scope, approach, deliverables, roles and responsibilities, and timeframes for completing knowledge transfer. The strategy would be developed to provide for knowledge transfer prior to go-live and during the launch support period. This plan would be based on an assessment of the skills of CT State staff.
3	D6.3.2		At a minimum, the Transition and Knowledge Transfer Plan deliverable would contain the following: A) Completion of Transition Planning Analysis B) Develop Transition Planning Approach C) Identify criteria to indicate when knowledge transfer is complete D) Identify stakeholders and appropriately involve in the launch support policies, processes, and procedures E) Summary of performance metrics related to knowledge transfer are prepared F) Finalize maintenance of all documentation G) Develop timeline and methodology for knowledge transfer related of designated key tasks, roles, and responsibilities to State staff
2	D6.4	Conclusion of Warranty Period	
3	D6.4.1		The System Integrator would provide a Conclusion of Warranty Period deliverable at the completion of the Warranty Period to indicate the successful completion of all activities.
3	D6.4.2		At a minimum, the Conclusion of Warranty Period deliverable would contain the following: A) List and description of all planned activities B) Confirmation statement on completion of all planned activities

RESOURCE CONFIRMATION

The commitments are estimated based on the timing of award of the project and also will be based on the length of the assignment to the project appropriate for each individual's role, except in the event of illness, separation from service, or serious personal circumstances. We will work with the State to finalize the details of these commitments.

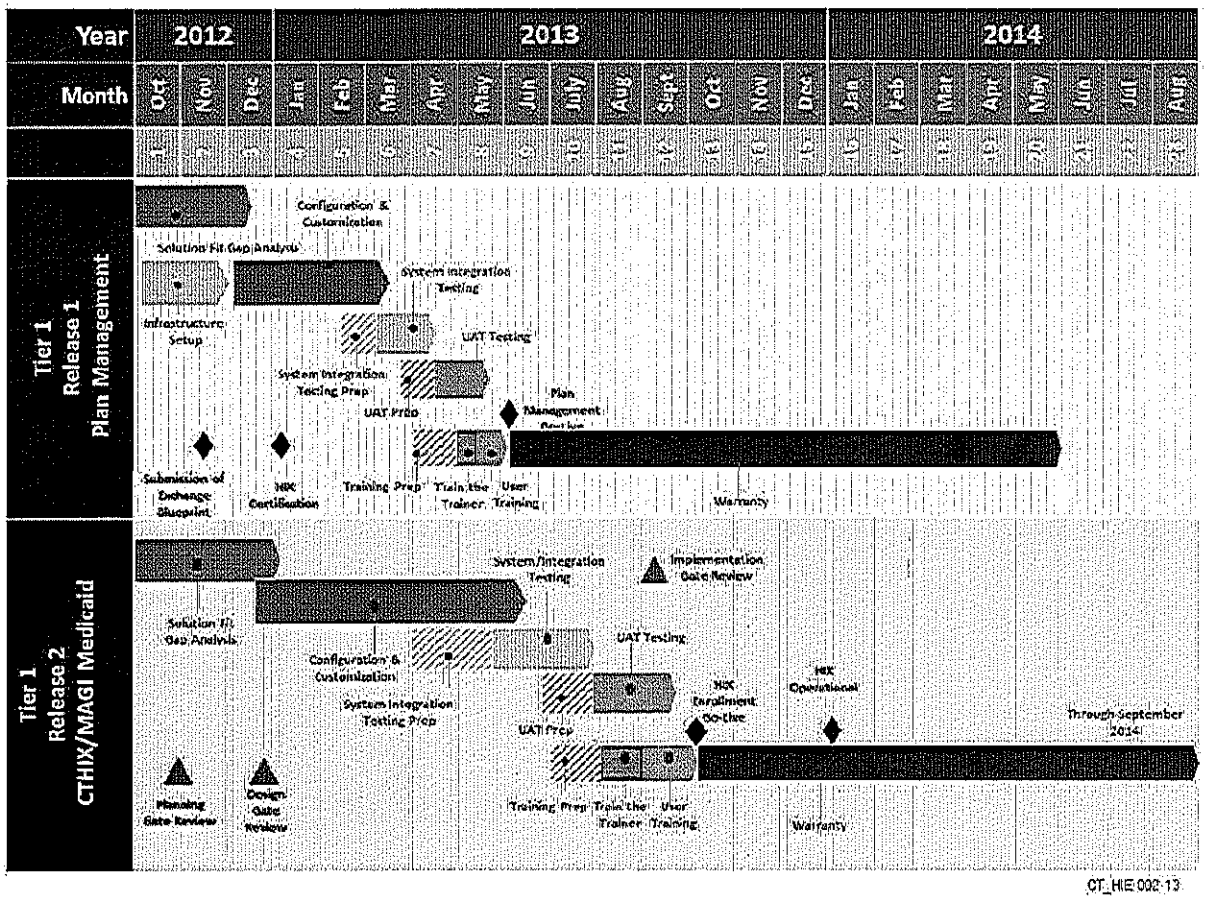
Title	Name	Commitment	Responsibilities
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Title	Name	Commitment	Responsibilities
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Title	Name	Commitment	Responsibilities
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

RELEASE SCHEDULE AND KEY DATES

The following chart summarizes the key dates of the proposed project schedule:



In accordance with the schedule above, the table below summarizes the key milestones.

Milestones	Date Milestone Achieved
CMS Gate Review – Project Startup Review	October 11, 2012

Milestones	Date Milestone Achieved
CMS Gate Review – Preliminary Design Review	November 13, 2012
Submission of Exchange Blueprint to Operate as a State-based Exchange	November 16, 2012
CMS Gate Review – Architecture Review	November 29, 2012
CMS Gate Review – Project Baseline Review	November 29, 2012
CMS Gate Review – Detailed Design Review	December 21, 2012
CMS Gate Review – Final Detailed Design Review	December 24, 2012
HIX Certification by the Center for Consumer Information and Insurance Oversight (CCIIO)	January 1, 2013
CMS Gate Review – Pre-Operational Readiness Review	May 26, 2013
Plan Management Go-Live	June 1, 2013
CMS Gate Review – Operational Readiness Review	September 13, 2013
Final Roll-Out of CT HIX/MAGI eligibility Solution	October 1, 2013
Accept Pre-Enrollments for the MAGI Population	October 1, 2013
Close Project	September 30, 2014

General Project Assumptions

1. Delivery of this SOW requires an October 1, 2012 project start date and two system go-live release dates: June 1, 2013 (R1: Plan Management) and October 1, 2013 (R2: CT HIX/IE)
2. The procurement, definition and execution of Customer focus groups, is not within the scope of this SOW response. Deloitte will provide support to the State in making the system available and responding to questions during these sessions. Deloitte assumes that no more than three sessions (of up to four hours in duration) will require support.
3. After September 2014, the State shall be solely responsible for system maintenance of the CT HIX/IE.
4. Maintenance and Operations (M&O) services are excluded from the scope of this SOW. Given that the first release is scheduled for go-live as early as June 1, 2013, Deloitte recommends that the parties initiate and execute an M&O contract agreement no later than November 30, 2012.
5. The State will provide Deloitte with needed office space. Deloitte expects the State to accommodate a local Hartford-based team of 30 staff at any one time. The State will provide conference lines for implementation support.

6. Deloitte assumes that any changes required as a result of Federal Government and regulatory updates may require a change order to address the impact thereof on our overall scope, level of effort, schedule, and price.
7. Our proposed level of effort is based on the foundational components made available with our transfer (NextGen™) solution. In alignment with the State's intent to minimize modifications made to the base software, we have assumed that the foundational components of the transfer will be implemented "as is", with minimal changes necessary based on our estimated levels of effort to meet the Connecticut specific requirements. For example, the look and feel, screen layout, navigation, field labels will be accepted as is.
8. We assume that the State will provide Deloitte access to or take responsibility for uploading documents to CALT.
9. The SOW cost provided herein does not include assistance that may be needed to meet additional or modified federal or state requirements or other needs of the State. If changes to the solution are needed we will provide an estimate of the hours required to make the changes(s), detailing the modification(s) to be made, staff hours necessary to accomplish the task. Upon State approval of the change order, we will begin work on the enhancement as agreed to with the State once we receive the Purchase Order.
10. Our cost is based on the State adhering to a deliverable review process as described in our response, Sections F and H, and the alignment of your requirements to the NextGen™ solution, further validated during the inception and elaboration phases of the project.
11. Deloitte Consulting will not be responsible for delays or costs associated with unavailability of necessary state resources and Subject Matter Experts, but will communicate any such perceived, anticipated, or actual delays to the designated Project Manager.
12. The parties' responsibilities set out under the underlying Agreement shall continue to govern this SOW. This SOW extends those expectations and terms accordingly.

    Deloitte Consulting's performance is dependent upon the timely and effective satisfaction of Client's responsibilities hereunder and timely decisions and approvals of the State in connection with the Services. Deloitte Consulting shall be entitled to rely on all decisions and approvals of the State.

13. Responsibilities

Deloitte Role	Connecticut Role
• Facilitate the joint design sessions using supporting materials and capture the associated To-Be design • Facilitate focus groups with key CT staff to gather specific information around complex requirements • Review business requirements with subject matter experts after the completion of the joint sessions • Document processes, sub-processes, activities and steps associated with the system • Develop design documentation including use case diagrams, detailed use case flows and screen prototypes • Schedule and facilitate meetings for feedback regarding the	• Provide any additional business requirements and policies and procedures to be included in the materials • Participation of key SMEs in focus groups, interviews as required • Participate in focus groups to provide additional information around complex requirements • Review and provide input on all business requirements • Review and provide input on all business process and the associated elements required in the Design • Review and validate deliverables and artifacts • Provide written approval of the deliverable

Deloitte Role	Connecticut Role
outcome of the presentation • Submit deliverable to CT for approval • Conduct deliverable walkthroughs with CT to validate new processes and system design • Develop detailed system design deliverables and artifacts • Develop Data Model and Data Dictionary • Facilitate meetings for feedback regarding the outcome of the presentation	• Schedule and provide meeting facilities for joint design sessions • Provide access to source system documentation (file layout, data dictionary, data model, platform, design, user manuals, etc.) • Validate the templates used for specifications for screens, correspondence, reports, etc. • Review all deliverables and artifacts • Participate in document review sessions • Provide written approval of the deliverable

EXHIBIT B
PROJECT IMPLEMENTATION SCHEDULE

Date	Del #	Deliverable	Description	Cost
		Monthly Status Reports	The System Integrator is required to send monthly status reports to the PMO throughout the duration of the contract. Within the report, the System Integrator should document project risks and issues encountered for PMO review.	[redacted]
Oct-12	1	Monthly Status Report - Month 1		[redacted]
Nov-12	2	Monthly Status Report - Month 2		[redacted]
Dec-12	3	Monthly Status Report - Month 3		[redacted]
Jan-13	4	Monthly Status Report - Month 4		[redacted]
Feb-13	5	Monthly Status Report - Month 5		[redacted]
Mar-13	6	Monthly Status Report - Month 6		[redacted]
Apr-13	7	Monthly Status Report - Month 7		[redacted]
May-13	8	Monthly Status Report - Month 8		[redacted]
Jun-13	9	Monthly Status Report - Month 9		[redacted]
Jul-13	10	Monthly Status Report - Month 10		[redacted]
Aug-13	11	Monthly Status Report - Month 11		[redacted]
Sep-13	12	Monthly Status Report - Month 12		[redacted]
Oct-13	13	Monthly Status Report - Month 13		[redacted]
Nov-13	14	Monthly Status Report - Month 14		[redacted]
Dec-13	15	Monthly Status Report - Month 15		[redacted]
Jan-14	16	Monthly Status Report - Month 16		[redacted]
Feb-14	17	Monthly Status Report - Month 17		[redacted]
Mar-14	18	Monthly Status Report - Month 18		[redacted]
Oct-12	19	Initiation, Concept and Planning	Deliverable includes: • Work Plan • Resource Plan • Project Management Plan • Deliverable Planning and Expectation Process • Release Plan • Application Development Plan • Configuration Management Plan • Establishment Reviews Packages	[redacted]

Date	Del #	Deliverable	Description	Cost
Nov-12	20	R1 - Requirements Document	After the Requirements Validation and Prioritization process is complete, the requirements would need to be elaborated at a more detailed level to facilitate design activities. The System Integrator would review the contents of the requirements documentation with the key stakeholders to review and elaborate as necessary in the Integrated Requirements Plan. Deliverable includes: • Requirements Validation and Prioritization Plan • Integrated Requirements Plan	[redacted]
Dec-12	21	R1 – Business Design Document	Once a finalized requirements plan is in place, the System Integrator shall undertake a design process in-line with its SDLC as described within its contract, and elaborated and confirmed in the Application Development Plan. Deliverable includes: • Business Systems Design • Organizational Readiness Plan	[redacted]
Dec-12	22	R1 – Technical Design Document	Deliverable includes: • System Architecture Design Document • Conceptual Data Model • Logical Data Model • Technical Design • Interface Control Document • Physical Data Model • Data Dictionary • Data Management Plan • Contingency/Recovery Plan	[redacted]
Dec-12	23	R1 – Security Design Document	The System Integrator would assist the State in identifying all relevant standards (including Federal, State and Local laws and regulations) based on the functionality being deployed and would be responsible for developing a security plan. The plan would describe how the System Integrator will comply with Enterprise Security Standards.	[redacted]

Date	Del #	Deliverable	Description	Cost
			Deliverable includes: • Security Plan • Privacy Impact Assessment	
Mar-13	24	R1 – Configuration and Customization	Deliverable includes: • Completion of all code modules • Automated Code Review Results	[redacted]
Jan-13	25	R1 – SIT Test Plan	The System Integrator would be responsible for the planning and execution of unit, system, performance (both stress and volume), security, regression, and integration testing. The System Integrator would also provide user testing and training environments and provide required support such as error logging, bug fixing, and troubleshooting. The test plan will include the test cycle, test scripts, conditions, a plan for test data creation, and expected results definition for each test phase. The scope of the testing would address all detailed requirements developed and follow the test cases developed by the System Integrator for the system.	[redacted]
Apr-13	26	R1 – Test Results Summary Document	The System Integrator would document the results of all testing areas identified within the Test Plan in the Test Results Summary Document.	[redacted]
Apr-2013	27	R1 – Operations and Maintenance Manual	The System Integrator will create an Operations and Maintenance Manual (e.g., Runbook) to capture procedures, and technical infrastructure to maintain the State system. It would also contain descriptions for handling exception scenarios/conditions, and incidents. The runbook would be written in a manner to allow experienced operators to effectively manage, troubleshoot and restore a system.	[redacted]

Date	Del #	Deliverable	Description	Cost
May-13	28	R1 – Training and Implementation	The Training Plan deliverable would need to describe the training approach and plan for each agency individually. The System Integrator would perform a readiness assessment for system users (internal and external) to determine the degree and type of training that should be offered. The training plan should include estimates based on a "train-the-trainer" model. The System Integrator would present a detailed Implementation Plan for the completion of activities for the State. Deliverable includes: • Training Plan • Implementation Plan • Deployment Plan • Operational Support Plan • Transition and Knowledge Transfer Plan	[redacted]
May-14	29	R1 – Warranty	The System Integrator would provide a Conclusion of Warranty Period deliverable at the completion of the Warranty Period to indicate the successful completion of all activities. Deliverable includes: • System Acceptance Plan • Conclusion of Warranty Period	[redacted]
Dec-12	30	R2 – Update to Requirements Document	After the Requirements Validation and Prioritization process is complete, the requirements would need to be elaborated at a more detailed level to facilitate design activities. The System Integrator would review the contents of the requirements documentation with the key stakeholders to review and elaborate as necessary in the Integrated Requirements Plan. Deliverable includes: • Requirements Validation and Prioritization Plan	[redacted]

Date	Del #	Deliverable	Description	Cost
			• Integrated Requirements Plan	
Dec-12	31	R2 – Update to Business Design Document	Once a finalized requirements plan is in place, the System Integrator shall undertake a design process in-line with its SDLC as described within its contract, and elaborated and confirmed in the Application Development Plan. Deliverable includes: • Business Systems Design • Organizational Readiness Plan	[redacted]
Dec-12	32	R2 – Update to Technical Design Document	Deliverable includes: • System Architecture Design Document • Conceptual Data Model • Logical Data Model • Technical Design • Interface Control Document • Physical Data Model • Data Dictionary • Data Management Plan • Contingency/Recovery Plan	[redacted]
Dec-12	33	R2 – Update to Security Design Document	The System Integrator would assist the State in identifying all relevant standards (including Federal, State and Local laws and regulations) based on the functionality being deployed and would be responsible for developing a security plan. The plan would describe how the System Integrator will comply with Enterprise Security Standards. Deliverable includes: • Security Plan • Privacy Impact Assessment	[redacted]
Jun-13	34	R2 – Configuration and Customization	Deliverable includes: • Completion of all code modules • Automated Code Review Results	[redacted]

Date	Del #	Deliverable	Description	Cost
Aug-13	35	R2 – Update to Operations and Maintenance Manual	The System Integrator will create an Operations and Maintenance Manual (e.g., Runbook) to capture procedures and technical infrastructure to maintain the State system. It would also contain descriptions for handling exception scenarios/conditions, and incidents. The runbook would be written in a manner to allow experienced operators to effectively manage, troubleshoot, and restore a system.	[redacted]
Mar-13	36	R2 – SIT Test Plan	The System Integrator would be responsible for the planning and execution of unit, system, performance (both stress and volume), security, regression, and integration testing. The System Integrator would also provide user testing and training environments and provide required support such as error logging, bug fixing, and troubleshooting. The test plan will include the test cycle, test scripts, conditions, a plan for test data creation, and expected results definition for each test phase. The scope of the testing would address all detailed requirements developed and follow the test cases developed by the System Integrator for the system.	[redacted]
Jul-13	37	R2 – Test Results Summary Document	The System Integrator would document the results of all testing areas identified within the Test Plan in the Test Results Summary Document.	[redacted]
Aug-13	38	R2 – Update to Training and Implementation	The Training Plan deliverable would need to describe the training approach and plan for each agency individually. The System Integrator would perform a readiness assessment for system users (internal and external) to determine the degree and type of training that should be offered. The training plan should include estimates based on a "train-the-trainer" model. The System Integrator would present a detailed implementation plan for the completion of activities for the State.	[redacted]

Date	Del #	Deliverable	Description	Cost
			Deliverable includes: • Training Plan • Implementation Plan • Deployment Plan • Operational Support Plan • Transition and Knowledge Transfer Plan	
Jan-13	39	Exchange Certification Application	The System Integrator is responsible for proving all required deliverables and work products to ensure successful certification and operation of the Connecticut Exchange. The System Integrator should document how it plans to ensure the State meets all legal requirements for successful operation of CT HIX/IE in a certification application deliverable and demonstrate the CT HIX/IE actual ability to meet the federal standards and be ready to offer health care coverage on January 1, 2014.	[redacted]
Mar-14	40	R2 – Warranty	The System Integrator would provide a Conclusion of Warranty Period deliverable at the completion of the Warranty Period to indicate the successful completion of all activities. Deliverable includes: • System Acceptance Plan • Conclusion of Warranty Period	[redacted]
Jul-14	41	R2 – Warranty	The System Integrator would provide a Conclusion of Warranty Period deliverable at the completion of the Warranty Period to indicate the successful completion of all activities. Deliverable includes: • System Acceptance Plan • Conclusion of Warranty Period	[redacted]
		Total		**$42,542,500**