

Request for Proposal (RFP) No: 6721 Z1, Modernized Motor Carrier Services Information System (MMCIS)

Response to sections II through VI (Option 1)

Due Date: December 13, 2022 (2:00 PM)



State of Nebraska Department of Administrative Service (DAS), Materiel Division, State Purchasing Bureau (SPB)

Submitted by: Celtic Systems, An i3Verticals Company

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II. TERMS AND CONDITIONS

Bidders should complete Sections II through VI as part of their proposal. Bidder is expected to read the Terms and Conditions and should initial either accept, reject, or reject and provide alternative language for each clause. The bidder should also provide an explanation of why the bidder rejected the clause or rejected the clause and provided alternate language. By signing the Request for Proposal, bidder is agreeing to be legally bound by all the accepted terms and conditions, and any proposed alternative terms and conditions submitted with the proposal. The State reserves the right to negotiate rejected or proposed alternative language. If the State and bidder fail to agree on the final Terms and Conditions, the State reserves the right to reject the proposal. The State of Nebraska is soliciting proposals in response to this Request for Proposal. The State of Nebraska reserves the right to reject proposals that attempt to substitute the bidder's commercial contracts and/or documents for this Request for Proposal.

The bidders should submit with their proposal any license, user agreement, service level agreement, or similar documents that the bidder wants incorporated in the Contract. The State will not consider incorporation of any document not submitted with the bidder's proposal as the document will not have been included in the evaluation process. These documents shall be subject to negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the Addendum to Contract Award have been negotiated and agreed to, the Addendum to Contract Award shall be interpreted as follows:

- 1. If only one Party has a particular clause then that clause shall control,
- 2. If both Parties have a similar clause, but the clauses do not conflict, the clauses shall be read together,
- 3. If both Parties have a similar clause, but the clauses conflict, the State's clause shall control.

Response: Celtic Systems, an i3 Verticals Company ("Celtic"), understands and has read all terms and conditions. We have initialed all terms and conditions either accept (\checkmark), reject (X), or reject and provide alternative language for applicable clause (?).

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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- **1.** The contract resulting from this Request for Proposal shall incorporate the following documents:
 - a. Request for Proposal and Addenda,
 - **b.** Amendments to the Request for Proposal,
 - c. Questions and Answers,
 - d. Bidder's proposal (Request for Proposal and properly submitted documents);
 - e. The executed Contract and Addendum One to Contract, if applicable; and,
 - f. Amendments/Addendums to the Contract.

These documents constitute the entirety of the contract.

- 2. Unless otherwise specifically stated in a future contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document:
 - **a.** Amendment to the executed Contract with the most recent dated amendment having the highest priority,
 - **b.** Addendum One to the executed Contract,

- c. The executed Contract and any additional attached Addenda,
- d. Amendments to Request for Proposal and any Questions and Answers,
- e. The original Request for Proposal document and any Addenda, and
- f. The Contractor's submitted Proposal.

Any ambiguity or conflict in the contract discovered after its execution, not otherwise addressed herein, shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

B. NOTIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Contractor and State shall identify the contract manager who shall serve as the point of contact for the executed contract.

Communications regarding the executed contract shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth below, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or five (5) calendar days following deposit in the mail.

Either party may change its address for notification purposes by giving notice of the change and setting forth the new address and an effective date.

C. NOTICE (POC)

The State reserves the right to appoint a Buyer's Representative to manage [or assist the Buyer in managing] the contract on behalf of the State. The Buyer's Representative will be appointed in writing, and the appointment document will specify the extent of the Buyer's Representative authority and responsibilities. If a Buyer's Representative is appointed, the Contractor will be provided a copy of the appointment document and is expected to cooperate accordingly with the Buyer's Representative. The Buyer's Representative has no authority to bind the State to a contract, amendment, addendum, or other change or addition to the contract.

Response: Celtic understands and shall comply with this requirement.

D. GOVERNING LAW (Statutory)

Notwithstanding any other provision of this contract, or any amendment or addendum(s) entered into contemporaneously or at a later time, the parties understand and agree that, (1) the State of Nebraska is a sovereign state and its authority to contract is therefore subject to limitation by the State's Constitution, statutes, common law, and regulation; (2) this contract will be interpreted and enforced under the laws of the State of Nebraska; (3) any action to enforce the provisions of this agreement must be brought in the State of Nebraska per state law; (4) the person signing this contract on behalf of the State of Nebraska does not have the authority to waive the State's sovereign immunity, statutes, common law, or regulations; (5) the indemnity, limitation of liability, remedy, and other similar provisions of the final contract, if any, are entered into subject to the State's Constitutions of the final contract, including but not limited to the clauses concerning third party use, licenses, warranties, limitations of liability, governing law and venue, usage verification, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity, remedy or other similar provisions of the final contract, needy or other similar provisions of the grave subject to the State's constitution, statutes, common law, regulations, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity.

The Nebraska Department of Motor Vehicles, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into, all Contractors and subcontractors will be afforded full

opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of the owner's race, color, national origin, sex, age, disability, income-level, or LEP in consideration for an award.

The Parties must comply with all applicable local, state and federal laws, ordinances, rules, orders, and regulations.

Response: Celtic has read instructions in Section D – Governing Law (Statutory) and shall comply with all applicable local, state, and federal laws, ordinances, rules, orders, and regulations.

E. BEGINNING OF WORK

The bidder shall not commence any billable work until a valid contract has been fully executed by the State and the successful Contractor. The Contractor will be notified in writing when work may begin.

Response: Celtic will commence billable work after getting notified by the State in writing when work may begin.

F. AMENDMENT

This Contract may be amended in writing, within scope, upon the agreement of both parties.

Response: Celtic understands and shall comply with this requirement.

G. CHANGE ORDERS OR SUBSTITUTIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The State and the Contractor, upon the written agreement, may make changes to the contract within the general scope of the Request for Proposal. Changes may involve specifications, the quantity of work, or such other items as the State may find necessary or desirable. Corrections of any Deliverable, service, or work required pursuant to the contract shall not be deemed a change. The Contractor may not claim forfeiture of the contract by reasons of such changes.

The Contractor shall prepare a written description of the work required due to the change and an itemized cost sheet for the change. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's proposal, were foreseeable, or result from difficulties with or failure of the Contractor's proposal or performance.

No change shall be implemented by the Contractor until approved by the State, and the Contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

In the event any product is discontinued or replaced upon mutual consent during the contract period or prior to delivery, the State reserves the right to amend the contract or purchase order to include the alternate product at the same price.

Contractor will not substitute any item that has been awarded without prior written approval of SPB

H. VENDOR PERFORMANCE REPORT(S)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The State may document any instance(s) of products or services delivered or performed which exceed or fail to meet the terms of the purchase order, contract, and/or Request for Proposal specifications. The State Purchasing Bureau may contact the Vendor regarding any such report. Vendor performance report(s) will become a part of the permanent record of the Vendor.

I. BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Either Party may terminate the contract, in whole or in part, if the other Party breaches its duty to perform its obligations under the contract in a timely and proper manner. Termination requires written notice of default and a thirty (30) calendar day (or longer at the non-breaching Party's discretion considering the gravity and nature of the default) cure period. Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing time to cure a failure or breach of contract does not waive the right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the service from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

The State's failure to make payment shall not be a breach, and the Contractor shall retain all available statutory remedies and protections.

J. NON-WAIVER OF BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The acceptance of late performance with or without objection or reservation by a Party shall not waive any rights of the Party nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

K. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the provision held to be invalid or illegal.

L. INDEMNIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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1. GENERAL

The Contractor agrees to defend, indemnify, and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all third party claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State for personal injury, death, or property loss or damage, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, resulting from this contract, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. INTELLECTUAL PROPERTY (Optional)

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this Request for Proposal.

3. PERSONNEL

The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel, including subcontractor's and their employees, provided by the Contractor.

4. SELF-INSURANCE

The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities

under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 et seq. and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

6. The Parties acknowledge that Attorney General for the State of Nebraska is required by statute to represent the legal interests of the State, and that any provision of this indemnity clause is subject to the statutory authority of the Attorney General.

M. ATTORNEY'S FEES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Parties agree to pay all expenses of such action, as permitted by law and if ordered by the court, including attorney's fees and costs, if the other Party prevails.

N. ASSIGNMENT, SALE, OR MERGER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Either Party may assign the contract upon mutual written agreement of the other Party. Such agreement shall not be unreasonably withheld.

The Contractor retains the right to enter into a sale, merger, acquisition, internal reorganization, or similar transaction involving Contractor's business. Contractor agrees to cooperate with the State in executing amendments to the contract to allow for the transaction. If a third party or entity is involved in the transaction, the Contractor will remain responsible for performance of the contract until such time as the person or entity involved in the transaction agrees in writing to be contractually bound by this contract and perform all obligations of the contract.

O. CONTRACTING WITH OTHER NEBRASKA POLITICAL SUB-DIVISIONS OF THE STATE OR ANOTHER STATE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor may, but shall not be required to, allow agencies, as defined in Neb. Rev. Stat. §81-145, to use this contract. The terms and conditions, including price, of the contract may not be amended. The State shall not be contractually obligated or liable for any contract entered into pursuant to this clause. A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

The Contractor may, but shall not be required to, allow other states, agencies or divisions of other states, or political subdivisions of other states to use this contract. The terms and conditions, including price, of this contract shall apply to any such contract, but may be amended upon mutual consent of the Parties. The State of Nebraska shall not be contractually or otherwise obligated or liable under any contract entered into pursuant to this clause. The State shall be notified if a contract is executed based upon this contract.

P. FORCE MAJEURE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Neither Party shall be liable for any costs or damages, or for default resulting from its inability to perform any of its obligations under the contract due to a natural or manmade event outside the control and not the fault of the affected Party ("Force Majeure Event"). The Party so affected shall immediately make a written request for relief to the other Party and shall have the burden of proof to justify the request. The other Party may grant the relief requested; relief may not be unreasonably withheld. Labor disputes with the impacted Party's own employees will not be considered a Force Majeure Event.

Q. CONFIDENTIALITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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All materials and information provided by the Parties or acquired by a Party on behalf of the other Party shall be regarded as confidential information. All materials and information provided or acquired shall be handled in accordance with federal and state law, and ethical standards. Should said confidentiality be breached by a Party, the Party shall notify the other Party immediately of said breach and take immediate corrective action.

It is incumbent upon the Parties to inform their officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable by 5 U.S.C. 552a (m)(1), provides that any officer or employee, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than \$5,000.

R. EARLY TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The contract may be terminated as follows:

- 1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
- 2. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination, the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.
- 3. The State may terminate the contract immediately for the following reasons:
 - a. if directed to do so by statute,
 - **b.** Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business,
 - **c.** a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court,
 - **d.** fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders,
 - e. an involuntary proceeding has been commenced by any Party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor,
 - **f.** a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code,
 - g. Contractor intentionally discloses confidential information,
 - h. Contractor has or announces it will discontinue support of the Deliverable; and,
 - i. In the event funding is no longer available.

S. CONTRACT CLOSEOUT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Upon contract closeout for any reason the Contractor shall within 30 days, unless stated otherwise herein:

- 1. Transfer all completed or partially completed Deliverables to the State,
- 2. Transfer ownership and title to all completed or partially completed Deliverables to the State,
- **3.** Return to the State all information and data unless the Contractor is permitted to keep the information or data by contract or rule of law. Contractor may retain one copy of any information or data as required to comply with applicable work product documentation standards or as are automatically retained in the course of Contractor's routine back up procedures,
- 4. Cooperate with any successor Contactor, person or entity in the assumption of any or all of the obligations of this contract,
- 5. Cooperate with any successor Contactor, person or entity with the transfer of information or data related to this contract,
- 6. Return or vacate any state owned real or personal property; and,
- 7. Return all data in a mutually acceptable format and manner.

Nothing in this Section should be construed to require the Contractor to surrender intellectual property, real or personal property, or information or data owned by the Contractor for which the State has no legal claim.

III. CONTRACTOR DUTIES

A. INDEPENDENT CONTRACTOR / OBLIGATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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It is agreed that the Contractor is an independent contractor and that nothing contained herein is intended or should be construed as creating or establishing a relationship of employment, agency, or a partnership.

The Contractor is solely responsible for fulfilling the contract. The Contractor or the Contractor's representative shall be the sole point of contact regarding all contractual matters.

The Contractor shall secure, at its own expense, all personnel required to perform the services under the contract. The personnel the Contractor uses to fulfill the contract shall have no contractual or other legal relationship with the State; they shall not be considered employees of the State and shall not be entitled to any compensation, rights or benefits from the State, including but not limited to, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

By-name personnel commitments made in the Contractor's proposal shall not be changed without the prior written approval of the State. Replacement of these personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.

All personnel assigned by the Contractor to the contract shall be employees of the Contractor or a subcontractor and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor or a subcontractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor or the subcontractor respectively.

With respect to its employees, the Contractor agrees to be solely responsible for the following:

- 1. Any and all pay, benefits, and employment taxes and/or other payroll withholding,
- 2. Any and all vehicles used by the Contractor's employees, including all insurance required by state law,
- 3. Damages incurred by Contractor's employees within the scope of their duties under the contract,
- 4. Maintaining Workers' Compensation and health insurance that complies with state and federal law and submitting any reports on such insurance to the extent required by governing law,
- 5. Determining the hours to be worked and the duties to be performed by the Contractor's employees; and,
- 6. All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination alleged against the Contractor, its officers, agents, or subcontractors or subcontractor's employees)

If the Contractor intends to utilize any subcontractor, the subcontractor's level of effort, tasks, and time allocation should be clearly defined in the contractor's proposal. The Contractor shall agree that it will not utilize any subcontractors not specifically included in its proposal in the performance of the contract without the prior written authorization of the State.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or subcontractor employee.

Contractor shall insure that the terms and conditions contained in any contract with a subcontractor does not conflict with the terms and conditions of this contract.

The Contractor shall include a similar provision, for the protection of the State, in the contract with any Subcontractor engaged to perform work on this contract.

B. EMPLOYEE WORK ELIGIBILITY STATUS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

- 1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at https://das.nebraska.gov/materiel/docs/pdf/Individual%20or%20Sole%20Proprietor%20United%20States%20Attestation%20Form%20English%20and%20Spanish.pdf
- **2.** The completed United States Attestation Form should be submitted with the Request for Proposal response.
- **3.** If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
- 4. The Contractor understands and agrees that lawful presence in the United States is required, and the Contractor may be disqualified, or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

C. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT/ NONDISCRIMINATION (Statutory)

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all Subcontracts for goods and services to be covered by any contract resulting from this Request for Proposal.

The Nebraska Department of Motor Vehicles, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the corresponding regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into pursuant to this solicitation, Contractors will not be discriminated against on the grounds of the owner's race, color, national origin, sex, age, disability, income-level, or Limited English Proficiency (LEP) in consideration for an award.

Response: Celtic has read and shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment.

D. COOPERATION WITH OTHER CONTRACTORS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Contractor may be required to work with or in close proximity to other contractors or individuals that may be working on same or different projects. The Contractor shall agree to cooperate with such other contractors or individuals and shall not commit or permit any act which may interfere with the performance of work by any other contractor or individual. Contractor is not required to compromise Contractor's intellectual property or proprietary information unless expressly required to do so by this contract.

E. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The contract price shall include the cost of all royalties, licenses, permits, and approvals, whether arising from patents, trademarks, copyrights or otherwise, that are in any way involved in the contract. The Contractor shall obtain and pay for all royalties, licenses, and permits, and approvals necessary for the execution of the contract. The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, software, and other items used to execute this contract.

The Contractor will be provided with motor vehicle data including personally identifiable data. The Contractor must comply with the Financial Data Protection and Consumer Notification of Data Security Breach Act of 2006 (Nebraska Revised Statute § 87-801 et seq.).

Additionally, the Contractor will be required to comply with all applicable law, including, but not limited to, Nebraska DMV regulations, the Driver's Privacy Protection Act (DPPA) of 1994 (18 USC §§2721-2725); and the Uniform Motor Vehicle Records Disclosure Act (Nebraska Revised Statute §60-2901 et seq.).

F. OWNERSHIP OF INFORMATION AND DATA / DELIVERABLES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The State shall have the unlimited right to publish, duplicate, use, and disclose all information and data developed or obtained by the Contractor on behalf of the State pursuant to this contract.

The State shall own and hold exclusive title to any Deliverable developed as a result of this contract. Contractor shall have no ownership interest or title, and shall not patent, license, or copyright, duplicate, transfer, sell, or exchange, the design, specifications, concept, or Deliverable.

G. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor shall throughout the term of the contract maintain insurance as specified herein and provide the State a current Certificate of Insurance/Acord Form (COI) verifying the coverage. The Contractor shall not commence work on the contract until the insurance is in place. If Contractor subcontracts any portion of the Contract the Contractor must, throughout the term of the contract, either:

- 1. Provide equivalent insurance for each subcontractor and provide a COI verifying the coverage for the subcontractor,
- 2. Require each subcontractor to have equivalent insurance and provide written notice to the State that the Contractor has verified that each subcontractor has the required coverage; or,
- **3.** Provide the State with copies of each subcontractor's Certificate of Insurance evidencing the required coverage.

The Contractor shall not allow any Subcontractor to commence work until the Subcontractor has equivalent insurance. The failure of the State to require a COI, or the failure of the Contractor to provide a COI or require subcontractor insurance shall not limit, relieve, or decrease the liability of the Contractor hereunder.

In the event that any policy written on a claims-made basis terminates or is canceled during the term of the contract or within (1) one year of termination or expiration of the contract, the contractor shall obtain an extended discovery or reporting period, or a new insurance policy, providing coverage required by this contract for the term of the contract and (1) one year following termination or expiration of the contract.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Notwithstanding any other clause in this Contract, the State may recover up to the liability limits of the insurance policies required herein.

1. WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contactors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. The policy shall include a waiver of subrogation in favor of the State. The COI shall contain the mandatory COI subrogation waiver language found hereinafter. The amounts of such insurance shall not be less than the limits stated hereinafter. For employees working in the State of Nebraska, the policy must be written by an entity authorized by the State of Nebraska Department of Insurance to write Workers' Compensation and Employer's Liability Insurance for Nebraska employees.

2. COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor and any Subcontractor performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

3. The Commercial General Liability Insurance shall be written on an occurrence basis, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. The policy shall include the State, and others as required by the contract documents, and government subdivisions of the State of Nebraska, including the Department of Motor Vehicles and its employees as Additional Insured(s). This policy shall be primary, and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory. The COI shall contain the mandatory COI liability waiver language found hereinafter. The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

REQUIRED INSURANCE COVERAGE	
COMMERCIAL GENERAL LIABILITY	
General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal/Advertising Injury	\$1,000,000 per occurrence
Bodily Injury/Property Damage	\$1,000,000 per occurrence
Medical Payments	\$10,000 any one person
Damage to Rented Premises (Fire)	\$300,000 each occurrence
Contractual	Included
Independent Contractors	Included
Abuse & Molestation	Included
If higher limits are required, the Umbrella/Excess Lia	bility limits are allowed to satisfy the higher limit.
WORKER'S COMPENSATION	
Employers Liability Limits	\$500K/\$500K/\$500K
Statutory Limits- All States	Statutory - State of Nebraska
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	*
Bodily Injury/Property Damage	\$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile	Included
liability	
Motor Carrier Act Endorsement	Where Applicable
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	\$5,000,000 per occurrence
PROFESSIONAL LIABILITY	
Professional liability (Medical Malpractice)	Limits consistent with Nebraska Medical
Qualification Under Nebraska Excess Fund	Malpractice Cap
All Other Professional Liability (Errors & Omissions)	\$1,000,000 Per Claim / Aggregate
COMMERCIAL CRIME	
Crime/Employee Dishonesty Including 3rd Party	\$1,000,000
Fidelity	
CYBER LIABILITY	
Breach of Privacy, Security Breach, Denial of	\$5,000,000
Service, Remediation, Fines and Penalties	
MANDATORY COI SUBROGATION WAIVER LANGU	JAGE
"Workers' Compensation policy shall include a waiver of	of subrogation in favor of the State of Nebraska."
MANDATORY COI LIABILITY WAIVER LANGUAGE	
"Commercial General Liability & Commercial Automobi	le Liability policies shall name the State of
Nebraska as an Additional Insured and the policies sha	all be primary and any insurance or self-insurance
carried by the State shall be considered secondary and	I non-contributory as additionally insured."

3. EVIDENCE OF COVERAGE

The Contractor shall furnish the Contract Manager, via email, with a certificate of insurance coverage complying with the above requirements prior to beginning work at:

Administrative Services Joy.fischer@nebraska.gov State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508

These certificates or the cover sheet shall reference the RFP number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

Reasonable notice of cancellation of any required insurance policy must be submitted to the contract manager as listed above when issued and a new coverage binder shall be submitted immediately to ensure no break in coverage.

4. DEVIATIONS

The insurance requirements are subject to limited negotiation. Negotiation typically includes, but is not necessarily limited to, the correct type of coverage, necessity for Workers' Compensation, and the type of automobile coverage carried by the Contractor.

H. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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If Contractor breaches the contract or anticipates breaching the contract the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach and may include a request for a waiver of the breach if so desired. The State may, at its discretion, temporarily or permanently waive the breach. By granting a temporary waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

I. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

J. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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By submitting a proposal, bidder certifies that no relationship exists between the bidder and any person or entity which either is, or gives the appearance of, a conflict of interest related to this Request for Proposal or project.

Bidder further certifies that bidder will not employ any individual known by bidder to have a conflict of interest nor shall bidder take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its contractual obligations hereunder or which creates an actual or appearance of conflict of interest.

If there is an actual or perceived conflict of interest, bidder shall provide with its proposal a full disclosure of the facts describing such actual or perceived conflict of interest and a proposed mitigation plan for consideration. The State will then consider such disclosure and proposed mitigation plan and either approve or reject as part of the overall bid evaluation.

K. STATE PROPERTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor shall be responsible for the proper care and custody of any State-owned property which is furnished for the Contractor's use during the performance of the contract. The Contractor shall reimburse the State for any loss or damage of such property; normal wear and tear is expected.

L. SITE RULES AND REGULATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor shall use its best efforts to ensure that its employees, agents, and Subcontractors comply with site rules and regulations while on State premises. If the Contractor must perform on-site work outside of the daily operational hours set forth by the State, it must make arrangements with the State to ensure access to the facility and the equipment has been arranged. No additional payment will be made by the State on the basis of lack of access, unless the State fails to provide access as agreed to in writing between the State and the Contractor.

M. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its goods or services are endorsed or preferred by the State. Any publicity releases pertaining to the project shall not be issued without prior written approval from the State.

N. NEBRASKA TECHNOLOGY ACCESS STANDARDS (Statutory)

Contractor shall review the Nebraska Technology Access Standards, found at <u>https://nitc.nebraska.gov/standards/index.html</u> and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request the contract comply with the changed standard at a cost mutually acceptable to the parties.

Response: Celtic has read and shall comply with this requirement.

O. DISASTER RECOVERY/BACK UP PLAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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The Contractor shall have a disaster recovery and back-up plan, of which a copy should be provided upon request to the State, which includes, but is not limited to equipment, personnel, facilities, and transportation, in order to continue delivery of services as specified under the specifications in the contract in the event of a disaster.

P. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Contractor certifies it maintains a drug free workplace environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

Q. WARRANTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Despite any clause to the contrary, the Contractor represents and warrants that its services hereunder shall be performed by competent personnel and shall be of professional quality consistent with generally accepted industry standards for the performance of such services and shall comply in all respects with the requirements of this Agreement. For any breach of this warranty, the Contractor shall, for a period of ninety (90) days from performance of the service, perform the services again, at no cost to Customer, or if Contractor is unable to perform the services. The rights and remedies of the parties under this warranty are in addition to any other rights and remedies of the parties provided by law or equity, including, without limitation actual damages, and, as applicable and awarded under the law, to a prevailing party, reasonable attorneys' fees and costs.

R. CUSTOMER SERVICE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
✓			

In addition to any specified service requirements contained in this agreement, the Contractor agrees and understands that satisfactory customer service is required. Contractor will develop or provide technology and business procedures designed to enhance the level of customer satisfaction and to provide the customer appropriate information given their situation. Contractor, its employees, Subcontractors, and agents must be accountable, responsive, reliable, patient, and have well-developed communication skills as set forth by the customer service industry's best practices and processes.

IV. PAYMENT

A. PROHIBITION AGAINST ADVANCE PAYMENT (Statutory)

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §§ 81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date, and the Contractor hereby waives any claim or cause of action for any such services.

Neb. Rev. Stat. §§81-2403 states, "[n]o goods or services shall be deemed to be received by an agency until all such goods or services are completely delivered and finally accepted by the agency."

Response: Celtic has read and shall comply with this requirement.

B. TAXES (Statutory)

The State is not required to pay taxes and assumes no such liability as a result of this Request for Proposal. The Contractor may request a copy of the Nebraska Department of Revenue, Nebraska Resale or Exempt Sale Certificate for Sales Tax Exemption, Form 13 for their records. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

Response: Celtic has read and shall comply with this requirement.

C. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Invoices for payments must be submitted by the Contractor to the agency requesting the services with sufficient detail to support payment. The Contractor must electronically submit invoices and include contract line number, Deliverable number from the RFP, total amount per Deliverable being invoiced, and a completed and signed Deliverable Acceptance Form. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

The State DMV Project Manager is the primary contact; the State DMV Controller or his or her designee shall be copied on all invoices. Email addresses will be provided to the Contractor.

D. INSPECTION AND APPROVAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Final inspection and approval of all work required under the contract shall be performed by the designated State officials.

The State and/or its authorized representatives shall have the right to enter any premises where the Contractor or Subcontractor duties under the contract are being performed, and to inspect, monitor or otherwise evaluate the work being performed. All inspections and evaluations shall be at reasonable times and in a manner that will not unreasonably delay work.

E. PAYMENT (Statutory)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2403). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any goods and services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services. State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. (Neb. Rev. Stat. Section 73-506(1))

F. LATE PAYMENT (Statutory)

The Contractor may charge the responsible agency interest for late payment in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408).

Response: Celtic has read and shall comply with this requirement.

G. SUBJECT TO FUNDING / FUNDING OUT CLAUSE FOR LOSS OF APPROPRIATIONS (Statutory)

The State's obligation to pay amounts due on the Contract for fiscal years following the current fiscal year is contingent upon legislative appropriation of funds. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal year(s) for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of termination. All obligations of the State to make payments after the termination date will cease. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

Response: Celtic has read and shall comply with this requirement.

H. RIGHT TO AUDIT (First Paragraph is Statutory)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
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Contractor shall establish and maintain a reasonable accounting system that enables the State to readily audit contract. (Neb. Rev. Stat. §84-304 et seq.) The State and its authorized representatives shall have the right to audit, examine, and make copies of or extracts from all financial and related records (in whatever form they may be kept, whether written, electronic, or other) relating to or pertaining to this contract kept by or under the control of the Contractor, including, but not limited to those kept by the Contractor, its employees, agents, assigns,

successors, and Subcontractors. Such records shall include, but not be limited to, accounting records, written policies and procedures; all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices; ledgers; cancelled checks; deposit slips; bank statements; journals; original estimates; estimating work sheets; contract amendments and change order files; back charge logs and supporting documentation; insurance documents; payroll documents; timesheets; memoranda; and correspondence.

Contractor shall, at all times during the term of this contract and for a period of five (5) years after the completion of this contract, maintain such records, together with such supporting or underlying documents and materials. The Contractor shall at any time requested by the State, whether during or after completion of this contract and at Contractor's own expense make such records available for inspection and audit (including copies and extracts of records as required) by the State. Such records shall be made available to the State during normal business hours at the Contractor's office or place of business. In the event that no such location is available, then the financial records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location that is convenient for the State. Contractor shall ensure the State has these rights with Contractor's assigns, successors, and Subcontractors, and the obligations of these rights shall be explicitly included in any subcontracts or agreements formed between the Contractor and any Subcontractors, to the extent that those subcontracts or agreements relate to fulfillment of the Contractor's obligations to the State. Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by the State unless certain exemption criteria are met. If the audit identifies overpricing or overcharges (of any nature) by the Contractor to the State in excess of one-half of one percent (.5%) of the total contract billings, the Contractor shall reimburse the State for the total costs of the audit. If the audit discovers substantive findings related to fraud, misrepresentation, or non-performance, the Contractor shall reimburse the State for total costs of audit. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Contractor's invoices and/or records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the State's findings to Contractor.

IV. PROJECT DESCRIPTION AND SCOPE OF WORK

The contractor shall provide the following information in response to this Request for Proposal.

A. PROJECT OVERVIEW

1. **OBJECTIVE**

The objective of this RFP is the acquisition, implementation, deployment, and maintenance of a modifiable, off-the-shelf solution to replace and modernize the Nebraska Department of Motor Vehicles' (NE DMV) current motor carrier services' information system. The new information system will hereinafter be referred to as the Modernized Motor Carrier Information System (MMCIS) or "system". The MMCIS will be used by NE DMV and other users for administration, regulatory compliance, collection and distribution of fees and taxes, auditing, and related functions for the commercial trucking industry.

Response: Celtic understands the complexities involved in the legacy modernization transformation journey and has significant experience implementing motor carrier solutions in other jurisdictions. We are well-positioned to assist NE DMV as a partner in the modernization of the Motor Carrier Information System (MMCIS).

Celtic has reviewed the implementation roadmap of NE DMV and agrees with its overall approach. The implementation and data migration timeline of 12 months for the motor carrier solution can be achieved only by using a Celtic Motor Carrier Solution (CMCS) COTS product.

CMCS COTS Solution provides out-of-the-box interface and compliance as listed below:

- Fully complies with all 12 PRISM/ITD implementation requirements
- Fully complies with IRP, Inc. transmittal, clearinghouse, data repository, and audit requirements
- Fully complies with IFTA, Inc. transmittal and clearinghouse requirements
- Production-proven fee calculator that is evergreen with rules and fees notifications posted by member jurisdictions
- IRP and IFTA Permits
- Our integrated document management system allows inline scanning/uploading and autoindexing of required documents collected across the transaction flow as required in Option 1 proposal
- Integration with State's ECM (OnBase) that allows scanning/uploading and auto-indexing of required documents collected across the transaction flow as required in Option 2 proposal

Our Proposed Implementation solution overview is below:

A. We will use our proven COTS solution CMCS (Celtic Motor Carrier System), which will provide most functionalities out of the box and require significantly less effort

in configuration and customization when compared to a custom development effort.

- B. Our solution will drive operational efficiencies through workflows, configurable rules, and integration with other internal and external applications.
- C. Easier maintenance of the solution using a modular design approach.
- D. Reduced implementation effort leveraging our prior knowledge and experience in implementing motor carrier solutions in twenty-two USA and Canadian jurisdictions.
- E. Agile development methodology to build the solution incrementally. The functionalities configured/customized will be available to NE DMV business users earlier to provide quicker feedback.
- F. Implement the solution in 12 months with a single deployment.
- G. Use current NE DMV data center and product licenses to reduce costs.
- H. Warranty support after Go-live.

2. OPTIONS FOR BIDDING

This RFP provides two options for bidding:

a. Option 1:

A solution that includes an MMCIS and a fully integrated document management system.

b. Option 2:

A solution that includes an MMCIS that will be fully functional and compatible with the State of Nebraska's existing document management system – Enterprise Content Management (ECM) (<u>https://cio.nebraska.gov/applications/ecm/index.html</u>).

Bidders may bid on one or both options. In order for a bidder to be considered for both options, a complete and separate proposal must be submitted for each option. Each proposal submitted must clearly identify which option is being bid for. The State of Nebraska will evaluate all proposals submitted within each separate option. The highest scoring bidder will be identified for each option (1 or 2). The State of Nebraska will make an award to the highest scoring bidder for the option that is determined to be in the best interest of the State and Nebraska Department of Motor Vehicles.

Response: Celtic has decided to bid for both options and submitted separate proposals with Option 1 and Option 2.

3. WITHIN THE SCOPE OF THE OPTION 1 SOLUTION

a. The design, development, testing, implementation, deployment, operation, user training, and maintenance of necessary software, limited hardware, and supplies for the MMCIS and a fully integrated document management system; and the professional services required to do so.

Response: Celtic staff will be introduced and will participate in the Project Kickoff meeting. Team Celtic will initiate the work on the key planning deliverables/ artifacts, such as the Project

Management Plan and the Project Work Plan. The base CMCS product will be deployed in a sandbox environment as part of the initiation and planning activities.

Sprint 0:

The Initial sprint, Sprint 0, will be consumed for project planning, initiation, scope identification, Epic to user stories creations, knowledge gathering, infrastructure setup, and other generic activities setting the base for the development sprint 1 to start.

The key activities, deliverables, and signoff criteria are explained in the table below.

Ac	tivities Involved	Key Deliverables	Sign-off criteria
Sp	rint 0		
•	Conduct a kick-off meeting with the stakeholders Ensure detailed Product backlog with user stories for functionalities is available	 Product backlog created Project Kick-off meeting 	Signoff of the below deliverables at the agreed-upon timeline- • Project Management Plan • Test Management
•	Start requirement workshops		PlanData Conversion Plan
•	Create Test Management Plan		Training Plan
•	Create Data Conversion Plan		
•	Create Training Plan Finalize the solution architecture		

Key expectations from the NE DMV:

- State Organization structure with key roles such as State Project manager, Lead Functional SME, Lead Technical SME, Scrum Master, Product Owner, etc., published with Celtic team names.
- Infrastructure team support for the environment, connectivity, and access setup.
- Publish high-level state requirements for the modules
- Participate in the requirements meetings with the Celtic team. It is assumed that the State Product owner will have the list of detailed requirements ready before the start of the project. During the initiation phase, the user stories/product backlog will be finalized by the State Product owner and Celtic team.

Program Increment

Each Program increment will involve a deployment at the end of 6 sprints with a sprint duration of 2 weeks. Hence deployment of the Product functionality will occur at the end of every six weeks.

The 6th sprint in each program increment will cover system Testing and User Acceptance Testing. The data migration will be done for the functionality implemented after every three months. The training activities will be conducted when the module development is completed. Multiple scrum teams will work in parallel during each sprint. The Celtic scrum master from each scrum team will be part of the state Scrum team under a state Scrum of the Scrum

Activities Involved	Key Deliverables	Sign-off criteria
Design and Build (First sprint th	nru Fifth sprint within a Program	m Increment)
 Design sprints will cover Functional or Technical design/ UI/ POCs Build sprints will cover design walkthrough, build, test plan, unit testing, Demo, and retrospection meeting Code for the user stories will be reviewed in the code review process Regular tracking through daily scrum meetings and Scrum of scrum meeting System demo will be given to the stakeholders after each sprint 	 Sprint Backlog Functional Design, Technical design, Test Plan Data Conversion scripts, test scripts, converted data Sprint Demo version of the software 	 Sign off after the Sprint demo User Stories completion of the sprint accepted by the product owner Automated acceptance test cases were completed for the user stories in the sprint. Sign off after code review
System Integration Testing (Bef	ore every deployment at the e	nd of each Program Increment)
 Prepare System Test cases Execution of system test cases Execution of Regression test cases NFR testing (Accessibility, Performance, and Security Testing) Defect raising, re-testing, and tracking to closure Preparation of test summary report Log and track defects Fix defects identified CRP (Conference room Pilot) Session Demo for 	 Defect Log Test run log Updated RTM 	 Provide testing support Review and sign-off System Integration testing gating met Non-functional requirements (NFR) testing for that increment was completed for that PI. Sign off after the CRP Session demo for that PI.

The key activities, deliverables, and signoff criteria are explained in the table below-

the PI should be completed and accepted by the stakeholders						
User Acceptance Testing Support (6 th or last sprint within a Program Increment)						
 Release sprint covering User Acceptance Testing and deployment at the end of every program increment Attend Defect Triage Meetings with State Analyze issues raised during acceptance testing Rework on defects 	 Acceptance tested code Defect Log Delivered Features log Prioritized User stories after each PI 	 Review and signoff acceptance testing defects closure UAT Acceptance Gating met User acceptance testing for that increment completed for that PI 				
Data Conversion (For every dep	loyment at the end of each Pro	ogram Increment)				
 Source data extraction to staging database using ETL Data validation in the staging area Data move from staging to the target database The mock version runs before the production conversion run 	 Data Conversion Plan Converted data in the target database 	Data Conversion Plan signoff				
Training (At the end of each Pro	ogram Increment)					
 Create / Training Plan Training Material development Train the trainer delivery for each module Capture Training lessons learned 	 Training Plan Training materials Train-the-Trainer Delivery 	 Approval of Training materials 				
Deployment (At the end of each	n Program Increment)					
 Provide deployment support to the NE DMV team 	 Deployed code in the target environment 	PI deployment signoff				

Key expectations from NE DMV:

- Review and timely approval of deliverables
- Participate in requirements/Functional design workshops with Celtic teams

- Provide Infrastructure team support for the environment, connectivity, access setup, issue resolution, and migration/deployment across test regions
- Provide clarification on functional understanding of legacy applications

Proposed Development Plan (Indicative):

The following table provides the indicative development plan with details of the module, function, sub-function, and activities planned to be done in each sprint. Each sprint will have parallel scrum teams. Scrum teams will work on the development of functionality, and the Data Conversion team will work on the parallel conversion. A stabilization sprint will be planned to complete pending activities during module development.

The user stories for the functions are not available yet but will be finalized before the start of project execution.

The indicative Development Plan for Modules/Functions of Vehicle Registration, Driver's License, Business Licensing, Driver's Enforcement, and Finance Management are as follows:

Sprint#	Module/ Functionality	Key activities
Sprint 0	Initiation and	Initiation and Planning
	Planning	Functional design – preparation for upcoming sprints
Sprint 1		• Functional Design (FD) – preparation for upcoming sprints
		• Technical Design (TD) – Preparation for upcoming sprints
		Build, UT, SIT, Sprint demo
Sprint 2		• FD, TD, Build, UT, SIT, Sprint demo
		CRP session and NFR Testing
Sprint n		• UAT, Data Conversion, Train the Trainers, Deployment,
		and Sprint retrospection

Pilot Testing and Go-Live Phase

In the Pilot testing phase, the developed functionality will be tested in parallel with the legacy system for all transactions.

Our cut-over approach is mentioned below-

- The rollout of all system functionality will be done for the defined set of users for the Pilot testing phase. All developed functionalities will be tested with various flows. It will be validated against the same transactions executed in the legacy system.
- Final Go-live of all modules at the end of the Pilot Testing Phase.

The key activities, deliverables, and signoff criteria are explained in the table below.

	Activities Involved	Key Deliverables	Sign-off criteria
Environment setup for Go-live			

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	Activities Involved		Key Deliverables		Sign-off criteria
•	Preparation of Pilot environment Data Conversion to New system Deployment of documents in preparation for the release	•	Migrated data to the Pilot environment Deployed code to Pilot environment	•	Successful data conversion completion
Tra	ining for Go-Live				
•	User Training on the new system Communication with users on what to expect from the new system	•	Training Delivery and manual available for the state	•	End User Training Completion
Pilc	ot Testing and Go-Live				
•	Parallel testing of functionalities in Legacy and New systems Data Validation between Legacy and new systems Deployment Support Retire / de-commission the Legacy application during Go-live Announce the success of the rollout with key highlights	•	Go-live of the new system for all state users	•	Signoff on the Pilot testing results Successful System Go- live for all users with no Level one defects

Key expectations from NE DMV:

- Setting up the Pilot office for Pilot Testing Phase with key users from the Business and IT teams
- Infrastructure team support for the environment, connectivity, and access setup.
- Provide logistics and support for End User training by Celtic

Post Implementation Support

The Post Implementation Phase involves warranty support and Maintenance and Operations activities.

Resources Involved

We recommend a project governance model built around proven program management principles, emphasizing clear and timely communication and decision-making. Model designed to ensure full collaboration across all tracks in scope for the engagement. This will create a shared vision/understanding of program objectives, plans, risks, issues, and changes and facilitate consensus in multi-level planning, with clearly defined roles and responsibilities, agreed-upon work methods, and transparency in communication. This model maximizes engagement with stakeholders while minimizing overlapping agendas. It also ensures a complete understanding of intra and inter-program dependencies.

Celtic recommends the following organization chart to deliver the NE DMV MMCIS Project based on our experience in past implementations of our product suite.



Figure 1 Project Organization Chart

The following table provides detailed roles and responsibilities for Celtic:

Roles	Responsibilities
Executive Sponsor	• Overall accountability for the Business Process activities (definition, validation, and sign-off).
	• Responsible for the overall program strategy, scope, budget, and timeline
	 Responsible for Strategic cross-functional alignment & dependencies for other IT initiatives

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Roles	Responsibilities
Engagement	Establishes project standards and processes
Manager	Responsible for the overall quality of services provided
	 Review business and risk issues related to the project with NE DMV
	Review and finalize project plans, schedules, and budget
	Participate in project executive meetings
	Manage Celtic internal Quality Assurance (QA) review process
	 Assess the effectiveness of resources, organizational structure, and roles
	Make sure the project is functioning effectively
	Responsible for NE DMV contract management and amendments, as necessary
	 Serve as a primary point of contact for NE DMV/ITS project executives
	 Serve as a primary point of contact to NE DMV key project staff prior to project initiation
Senior Project Manager	• Point of Contact (POC) from Celtic, who is responsible for the project execution
	• Primary responsibility to connect portfolio to enterprise strategy
	• The project Manager will work closely with the NE DMV to make scope change decisions and make sure that all project milestones are met
	• Works with Celtic functional, technical, and development managers to review and monitor project status
Senior Business	• Lead and participate in different phases of the engagement.
Architect	• Leads and contributes to conceptualizing an innovative solution.
	• Proactive in surfacing any client issues or concerns and developing new ideas to resolve them.
	• Has a good understanding of the Motor Vehicle domain and partners with the NE DMV Product Manager / Product Owner(s) and business SMEs.

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Roles	Responsibilities
Testing Co- Ordinator (QA Lead)	• The Test Co-Ordinator is responsible for the overall effort involved in system testing, including test strategy, planning, execution, and status reporting.
	• The Test Co-Ordinator will manage and oversee all phases of testing, including functional, security, performance, accessibility automation, and support user acceptance tests.
Senior Technical Solution Architect	 Primarily responsible for the solution architecture for Team Celtic. Will be responsible for all solution architecture and technical design artifacts, translating the functional requirements into the technical architecture of the solution. Assesses architectural impact on implementing proposed requirements. Participates in meetings and presents potential changes needed to application architecture along with recommendations for implementation. Works with the functional and technical leads to identify and resolve both intra-phase and inter-phase integration issues
Training Co- Ordinator	 Primarily responsible for defining training needs, developing training curriculum, training manuals, delivering end-user training, and supporting NE DMV's training efforts.
Release and Deployment Lead	 Works with NE DMV to plan upcoming releases and manages functional support teams. Receives and responds to requests. Works with Teams to support the requirements and design of the application. Leads to ensure there are no requirements and/or design gaps between business needs and application development. Triage defects to Teams during Regression, Performance test phases. Performing quality assurance and control activities for the release.
	Collaborate with the NE DMV IT team on post go-live activities.

Roles	Responsibilities
Scrum Master	 Responsible for the overall project (Sprint) success and deliverables
	Helps resolve impediments, ensures the team is fully functional and productive
	Provide prioritization of Architectural changes vs. User Story development
	 Facilitate Sr. Management reviews, provide status updates, and sign-off process
	Manage project communications, issues, and risks
Senior Data Analyst	• Data Architect will be responsible for all data design artifacts, database architecture, data migration, and data governance model

Roles	Responsibilities
Program Manager/PMO Manager	Approve Project Scope, strategic planning
	Contractual agreement(s)
	• Attends and contributes portfolio, strategic meetings, and scope definitions.
	Provides sign-off of each milestone completion.
	Authority to make project-related decisions.
	Reviews the risk management plan
Product Owner	Attends Scrum stand-up calls
	Addresses questions, resolve questions, and work to remove obstacles
	Defines Product Roadmap and provides inputs for Release planning
	 Develops product backlog and provide user stories, issue resolutions, and prioritize user stories
	Performs User Acceptance testing and defect prioritization
	Formally accepts/rejects product at completion

The following table provides recommended NE DMV roles for the project:

Roles	Responsibilities
	 Provides direction to the Project Management team on issues impacting triple constraints
	 Reviews and audits the project at regular intervals. Formally accept the project at completion
	Prepares list of Backlogs
	• Sprint planning on prioritizing user stories.
	 Reviews and approves project document drafts, artifacts, and deliverables in the Planning phase
	• Participate in sessions to assist the team in understanding the different roles, functions, and requirements; involves additional stakeholders and agencies, as necessary.
Functional / Business - Subject Matter Expert	• Participates in design JAD sessions. Assist the functional team in understanding the different programs and modules to provide detailed business knowledge.
	Reviews and provides feedback on functional deliverables.
	Go-to person for any domain or program-related questions
	Addresses questions, resolve questions, and works to remove obstacles
	 Provides signoffs and approves the design and functional implementations.
Technical/ Systems Architect	 Understands the NE DMV Policy and will be able to address any Technical Questions/clarifications regarding legacy systems.
	 Reviews architecture recommendations from the Celtic team and provides signoff(s)
	• Reviews the architecture and systems requirements implemented by the Celtic team are as per NE DMV requirements

Artifacts generated

As discussed in previous sections, various artifacts will be created through the project implementation as a part of deliverables, project references, and project checklists.

Celtic proposes a robust production roll out approach for Nebraska. The guiding principles for our production rollout approach are as follows:

• Plan releases in line with requirements resulting from approved changes

- Build effective release packages for the deployment of one or more changes in production
- Test release mechanisms to ensure minimum disruptions to the production environment
- Review preparation for the release to ensure successful deployment
- Deploy the release in line with structured implementation guidelines

Celtic proposes the production rollout approach shown below.

Rollout and Deployment Process	High Level activities
Rollout Planning	 Identify the scope and content of an approved change Perform risk assessments for the release and gain signoffs from designated groups/representatives Prioritize, plan, and schedule release activities Determine the resources and strategy for the release Document and track all release planning activities
Rollout Building	 Select a suitable release mechanism Design and build the release package in development and test environments Test the release package, and deliver the change in complete congruence with the requirements Ensure that the release package is updated to the configuration management database
Testing	 Design and build an accurate test environment that mimics the production Perform key functionality acceptance tests aligned to the requirements of the change and the release Perform controlled testing Evaluate acceptance testing results and signoff to make a confident move toward release preparation
Rollout Preparation	 Ensure adequate resources are available, training and user activity completion, etc. Prepare Implementation Plan Prepare Knowledge Transfer Plan
Celtic Systems V. PROJECT DESCRIPTION AND SCOPE OF WORK

Rollout Process	and Deployment	High Level activities		
		 Preparation for knowledge transfer sessions with the support team Complete End User Training Create Production Turn Over document and Troubleshooting guidelines Review the preparation and suitability of release for deployment into the production environment Ensure the change management process has handled all related changes Deployment Readiness Assessment Report to be reviewed with all key stakeholders Make Go / No Go Decision for Production deployment 		
Rollout Deployment		 Ensure users are trained, and the acquisition of skills and knowledge are measured and documented Database creation and data migration activities Deploy the release into the production environment Open Production Environment for Smoke Testing Application Readiness Testing: smoke test and testing of key functionalities by business users Make Go / No Go Decision Evoke emergency Fix Procedure in case of issues (Rollback to previous production state if required) Review the deployed release Send Communication to all key stakeholders on the completion of the deployment 		

We recommend the submission of a Production deployment readiness checklist Report by Celtic prior to every deployment during the Go/No-Go meeting. This report will provide a current readiness assessment considering staff, business processes, and systems before making a Go decision on deployment. Below is a sample report template.

1) Readiness Assessment Matrix – Staff

Topic Area	Core Recommendations	Readiness Level
End-User Readiness: Application Users Training		Green 🗸
Support Readiness: Application Support Personnel Training		Green 🗸
Support Readiness: Infrastructure Support Staff Training		Green 🗸

2) Readiness Assessment Matrix – Business Practices

Topic Area	Core Recommendations	Readiness Level
Solution Readiness: Complete User Acceptance Test		Green 🗸
Solution Readiness: Complete Performance Test		Green 🗸

3) Readiness Assessment Matrix – Systems

Topic Area	Core Recommendations	Readiness Level
Technical Infrastructure Readiness: Production Environment Installed and Configured		Green 🗸
Technical Infrastructure Readiness: Rollback Plan		Green 🗸
Technical Infrastructure: Complete Disaster Recovery Testing		Green 🗸

This certification report will be signed off by both Nebraska and Celtic team before deployment.

b. The extraction, transformation, and migration of all relevant data from the NE DMV's existing motor carrier information system to the MMCIS and new document management system; and the professional services required to do so.

Response: Our solution will use the Actian Pervasive tool to extract, transform, and load data into the target database.

The proposed data migration solution caters to the following requirements:

- A. Extracting legacy data from source systems
- B. Perform profiling, cleansing, and validation of the extracted source system data by Celtic proprietary tools.
- C. Perform needed transformations and load to target MMCIS
- D. A configurable metadata driven ETL Framework is built, and error logging and data reconciliation is performed.

The solution can be divided into three logical layers:

- 1. **The Sourcing Layer**: The sourcing layer consists of Legacy Data Stores, which have the master data for IRP. The data cleansing activity can be done here.
- 2. The Migration Layer: This layer contains all components used for migration. The data is extracted from the sourcing layer and loaded to Source Staging Area. This data is then transformed and loaded to an intermediate Target Staging Area. The intermediate Target Staging/storing area is used for storing transformed data which is aligned with the Target data model and can be loaded directly to Target. The validation, reconciliation, and auditing of transformed data can be performed in this intermediate Target Staging Area. The tools used by Celtic in this layer would be Actian Pervasive and an RDBMS (Microsoft SQL Server) Solution for the Source Staging Area and the intermediate Target Staging Area.
- 3. **The Target Layer:** The target layer would be the Celtic CMCS Solution. The transformed data will be shared as extract files in specified locations which can then be loaded to the OLTP data store of the proposed CTS-IRP Solution.

Below is a typical sequence of steps that make up our data plan and would be part of the NE DMV data conversion:

- Identify the required data sets to be converted during requirements gathering
- Obtain initial conversion files
- Table/Column level two-way mapping (Legacy \rightarrow CMCS and CMCS \rightarrow Legacy)
- Create conversion SQL for code tables
- Create delete SQL to clear data out of the database
- Conversion map creation

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- First conversion
- Prepare data clean-up reports
- Weekly clean-up reports review meeting with NE DMV
- Second conversion
- Prepare data clean-up reports
- Perform data cleansing activities
- System test
- Define test scripts and acceptance criteria
- System test PASS
- Team Celtic readiness reviews
- Integrated system demonstration
- Review/update final (Cut-over) data conversion plans and schedule
- Review/update final transition/cut-over plans and schedule
- Review/update final education and training plans and schedule
- Review/update final testing plans and schedule

Celtic will migrate all of the identified tables to the new Celtic data structures. We will create a two-way mapping plan to ensure no data fields are missed in the old format and ensure all the fields in the new data structure will contain valid values.

The migration activity will consist of multiple steps depending on the current data conditions. Celtic will create various reports at each step of the conversion to ensure:

- Counts in and out are consistent
- Data fields contain expected values
- Records that are not converted have an explanation, so they can be fixed and/or deleted

The Celtic conversion approach eliminates any conversion exceptions before the final run by

having multiple conversions using copies of production data and fixing exceptions as they occur. Our conversion programs will identify invalid field values, such as invalid codes and invalid phone numbers, NSC numbers, VIN's, etc.



The following diagram depicts our data migration process:

Figure 2 Data Migration Process

4. WITHIN THE SCOPE OF THE OPTION 2 SOLUTION

- **a.** The design, development, testing, implementation, deployment, operation, user training, and maintenance of necessary software, limited hardware, and supplies for the MMCIS; and the professional services required to do so.
- **b.** The design, development, testing, implementation, deployment, operation, user training, and maintenance of necessary software, limited hardware, and supplies to ensure the MMCIS is fully integrated with the State of Nebraska's existing ECM; any necessary extraction, transformation, and migration of relevant data from the ECM; and the professional services required to do so.

Other solutions shall also comply with the requirements listed in the Requirements Traceability Matrix (RTM). (see Appendix A for Option 1, Appendix C for Option 2)

Outside the scope of this project are:

- **a.** Registration of intrastate commercial vehicles
- b. Issuance of certificates of title
- c. Uniform Carrier Registration (UCR)
- d. Acquisition of standard hardware to support the solution

Response: We have provided a response for this section in our separate proposal with Option 2.

Other CMCS functions shall also comply with the requirements listed in the Requirements Traceability Matrix (RTM) - Appendix A for Option 1, Appendix C for Option 2.

Celtic understands that the following requirements are Outside the scope of this project:

- Registration of intrastate commercial vehicles
- Issuance of certificates of title
- Uniform Carrier Registration (UCR)
- Acquisition of standard hardware to support the solution

5. JUSTIFICATION AND BACKGROUND

The NE DMV is seeking to replace and modernize its entire motor carrier services information system to overcome system limitations and take advantage of promising business improvements. The solution will improve and integrate NE DMV's capabilities to meet current and future business needs of customers. Bidders are encouraged to read the 2019 business case report for replacing the existing motor carrier information system for additional background (see Appendix F).

Response: We at Celtic are pleased to participate in NE DMV's journey to modernize its Motor Carrier Information System (MMCIS).

Celtic has read the RFP thoroughly and understands NE DMV's requirements. Celtic has performed a preliminary "fit Gap" analysis of NE DMV's requirements specified in the solicitation and found that our CMCS COTS Solution is a 100% fit, Out of the Box. Normally we have found in the past that while our COTS solution is 100% compliant with the IRP & IFTA plans, including Audit Features, IRP Data Repository Modernization, and is fully PRISM compliant, 20-25% of the existing functionalities still need to be configured/ customized for each jurisdiction for their own rules, regulations, preferences, and uniqueness.

The Celtic CMCS is a comprehensive browser-based COTS solution for managing IRP registration, credentialing (IRP Cab Cards, Plates, and Validation stickers), apportionment of fees, issuance of IFTA License, decals, quarterly tax returns, audits, IRP/IFTA Permits, giving the NE DMV everything required for processing motor carrier business transactions. Our integrated document management system allows inline scanning/uploading and auto-indexing of required documents collected across the transaction flow. In addition, for renewals, the system handles updates from the previous year in a dual-year situation eliminating the need to re-enter the vehicle data multiple times.

At the core of the CMCS is our Fee Calculator - a regularly updated tool providing accurate fee calculations based on current jurisdiction fee schedules and the Canadian exchange rate. CMCS automates credit apportioning and generates a monthly IRP and IFTA Clearinghouse file. Our solution gives the ability to add jurisdiction-specific administrative fees and provides a detailed

breakdown of fees during invoice generation. In addition, our solution provides for base jurisdiction distribution of funds via general ledger codes. Our "Hand Calculation" module will display exactly how fees are calculated for each vehicle for each jurisdiction of travel. This tool eliminates the need to scan program logic in the event questions are raised by other jurisdictions regarding how fees are calculated.

CMCS generates notices to carriers on a regularly scheduled basis, and the system identifies accounts for suspension/revocation.

CMCS provides flexible, external interfacing capabilities to accommodate third-party payment systems, address validation, VIN validation services, and other NE DMV systems.

CMCS audit features allow authorized users to generate a letter of intent, enter audit results, generate an audit invoice, and collect payment. These audits will be included in the monthly automated Clearinghouse transmittal.

CMCS provides a solution that integrates account access for internal and online users. There are two sections, Services, and Operations. The Services section is where the Enterprise, IRP, IFTA, and Permits options reside, and the operations section is where the user management, inventory, and financial options reside.

The Enterprise Level functionality allows internal jurisdiction users to create new customers, update customers, create email templates and run ad hoc reports. The IRP & IFTA systems contain all the functionality and features needed to process, inquire or update account transactions and reprint invoices and credentials.

The Operations level functionality allows for the management of inventories, which can be assigned or reassigned to any branch location. Finance includes cashier drawers, payments, refunds, and reports to support the distribution of funds. User management allows the authorized user to create, maintain or reset a password for new and existing users.

Below is a sample screenshot of the CMCS Enterprise System Menu:

MCS HEAD OFFICE	Site Map					
Open Business Period: 04/03/2021 To 04/03/2021	Services / Enterprise					
🙆 User Dashboard	Customer	Audit	Jurisdiction	Email Management		
E Customer Dashboard	New Customer	Audit Selection	Jurisdiction Update	Edit Email Template		
0¢ Services ~	Update Customer Customer Inquiry	Audit Selection Work In Progress	Jurisdiction Inquiry	Sender/Recipient Management		
Enterprise	Service Provider More					
IRP/Intrastate						
Haz & Trip Permits						
IFTA	Administrative	User	Information	Reports		
OPA/Housemover	Administrative Fee	Change Password	Prerequisites	AdHoc		
Audit Tracking	Batch Process	User Profile	Version Info	Translog Inquiry		
E Operations >	Batch Process Inquiry	Change Office Location	Application Log	User Activity		
	Alert (Notrication)					
% Support →						
= web proceeder b						
≡ web Processing ,	Prism	Client Support	Miscellaneous Fee			
Ontario Application	Carrier Search	Screenshots	Miscellaneous Fee			
© 2020 Celtic Systems	Census Search	Exception Viewer	Miscellaneous Fee Inquiry			
v1.0.0.98918 (04/20/2018) BODEVT	venice search	Data Defect Management	work in Progress			

Figure 3 CMCS Enterprise System Menu

Below is a sample screenshot of the CMCS IRP System menu (1 of 3):

MCS HEAD OFFICE	Site Map			
Open Business Period: 04/03/2021 To 04/03/2021	Services / IRP/Intrastate			
🍘 User Dashboard	Account	Fleet	IRP Weight Group	Vehicle
Customer Dashboard	New Account	New Fleet	Change IRP Weight Group	Add Vehicle
	New Intrastate Account	New Intrastate Fleet	IRP Weight Group Inquiry	Delete Vehicle
Q Services Y	Update Account	Update Fleet	IRP Weight Group Supplement Base Inquiry	Add / Delete Vehicle
Enterprise	Account Inquiry	Renew Fleet		Amend Vehicle With Fees
IRP/Intrastate		More		More
Haz & Trip Permits				
IFTA	Vehicle Credential	Vehicle Inquiry	Vehicle Administration	Document Collection
OPA/Housemover				
OFACHOUSEMOVER	Replace Cab Card/Issue New TVC	Vehicle Inquiry	VIN Correction	Vehicle Documents
Audit Tracking	Replace Flace	TVC loguiny	Vehicle Maintenance	Supplement Documents
Operations	Replace Source	Failed OOS Cabcard Inquiry		
% Support →		More ►		

Figure 4 CMCS IRP System Menu

Below is a sample screenshot of the CMCS IRP System menu (2 of 3):

Other	Reprint	Web Processing	Error Correction
Work In Progress	Invoice Cabcard TVC Shipping Document More >	Pending	Error Correction Do-Vehicle Error Correction Undo Vehicle Error Correction IRP Do-Distance
Additional Inquiries	Distance	Reports	Administrative
Supplement Inquiry Comment Inquiry Fee Schedule Inquiry Factory Price Inquiry Audit / Error Correction Inquiry	IRP Distance Inquiry Jurisdiction Fee Inquiry AVD Chart Inquiry	Account List Report Aging Report Equipment By USDOT Report GVW Greater Than 54,999 Report More >	Batch Process Batch Process Inquiry Batch Billing Batch Credential More •

Below is a sample screenshot of the CMCS IRP System menu (3 of 3):

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Transaction Cancel	Audit Reporting	Audit Processing	Payment
Cancel Fleet Reinstatement	Audit Letter Of Intent Audit Vehicle Listing Audit Carrier Report Distance Analysis Report (IFTA vs IRP) Jurisdictional Distance/Fee Listing	IRP Process Audit Fleet/Distance Intrastate Audit	Next Day Cancellation Installment Payment Cancel Installment
Clearing House Data			
Load CH Customer & Details			

Below is a sample screenshot of the CMCS COTS IFTA System menu (1 of 2):

Celtic Motor Carrier System - IFTA (Environment: DEMO)	Level	Menu Finder Q 🛱 🗖	🖵 🕞 Log
e Map			
vices / IFTA			
Account	Tax Return	Work In Progress	
New Account	File/Amend	Tax Return	
Update Account	Correction	Uploaded Tax Return	
Account Inquiry	Upload Tax Return	Search Supplement	
	Tax Return Inquiry	Audit Return	
License	Web Processing	Audit	
Renew License	Submit	Audit Return	
Update License	Pending	Audit Inquiry	
License Inquiry			
Continue License			

Figure 5 CMCS IFTA System Menu

Below is a sample screenshot of the CMCS COTS IFTA System menu (2 of 2):

Other Supplements	Administrative	Document Collection
Additional Decals	Batch Process	Supplement Documents
Duplicate License	Tax Rates Load	
Change License Details	Waive Interest-Quarter	
Supplement Inquiry	Tax Rates Inquiry	
Reinstatement	More >	
Reports	Reprint	Payment
Account Added Report	License	Cancel Supplement
Tax Paid Gallons Report	Tax Return	Cancel Tax Return
Carrier Lists Report	Temporary Decal Permit	Cancel Audit Return
Audit Stratification Report	Blank Quarterly Tax Return	
More >	More >	

Below is a sample screenshot of the CMCS Trip Permit System menu:

Site Map Services / Haz & Trip Permits				
New Permit	Maintain Permit	Permit Administration		
Trip Permit Hazardous Waste Permit Hazardous Materials Endorsement	Work In Progress Inquiry Reprint Permit Reprint Renewal Notice	Renewal Buik Renewal Update Delete More >		

Figure 6 CMCS Trip Permit System Menu

Below is a sample screenshot of the CMCS TRIP Permit Details screen:

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Permit Details					
*Permit Type :		Transaction Type :	NPMT - NEW PERMIT	Permit No. :	
Duration :	CET. ELIEL REDMIT & COMPINIATION VEHICLES REDMIT	No. Of Permits :	~	Permit Status :	A - Active 🗸
*Effective Date :	CVT - COMBINATION VEHICLE PERMIT	Expiration Date :	MM/DD/YYYY HH:MM:SS	Exempt :	~
*Origin :	DLT - DEALER LADEN PERMIT	*Destination :		Commodity :	
Handwritten?:	OTA - OFF LOAD TRAVEL AUTHORIZATION PERMIT	Handwritten Permit No.:		Citation :	
Amount Overweight:	SFT - FUEL PERMIT & SINGLE VEHICLE PERMIT	Overweight Type :	~	Driver Name :	
EPA No.:	TTP - TRANSPORTER PERMIT	Manifest No.:		Weight Increased To:	~
Vendor:	UWT - UNLADEN PERMIT				
	W30 - TWIP30 - WEIGHT INCREASE PERMIT				
Fees Details	WTP - WRECKER PERMIT				

Below is a sample screenshot of the CMCS Finance System menu:

MCS HEAD OFFICE	Site Map			
Open Business Period: 04/03/2021 To 04/03/2021	Operations / Finance			
🚯 User Dashboard	Office	Cash Drawer	Reconciliation	Deposit
Customer Dashboard	Manage Office	Open Cash Drawer	Office Reconciliation	Office Deposit
og Services >	Update Office	Close Cash Drawer Cash Drawer Inquiry Adjust Cash Drawer	Adjust Reconciliation Reconciliation Inquiry	Adjust Deposit
Operations ~		Aujust Cash Dramer		
Inventory				
Finance	Payment	Refund	Reprint	System Credit Deposit
User Management	Cast Payment	Parkand American	Proment Persist	Sustam Condit Danasit
% Support →	Post Payment	Refund Inquiry	Deposit Statement	IRP Payment Plan
	Same Day Payment Cancellation		Combine IFTA / IRP Invoice	Cash Bond Deposit
	Payment Inquiry			System Credit Inquiry System Credit To Refund
Ontario Application	(n)			
© 2020 Celtic Systems v1.0.0.98918 (04/20/2018) BODEVT	Bond	Reports		
	New Bond	Transaction Inquiry		
	Update Bond	Deposit Financial Summary		
	Bond Inquiry	Ledger		
	Bond Report	Credit Processing		
		More *		

Figure 7 CMCS Finance System Menu

Below is a sample screenshot of the CMCS User Management System menu:

Site Map			
Operations / User Management			
\sim			
User	Role	Location	Reports
Create Mobile User Update Mobile User Create User Update User Reset Password	Create Role Edit Role	Add Location Update Location Change Port Location	Roles Functions Report Users Report

Figure 8 CMCS User Management System Menu

Customer 360° view

The CMCS will allow the customer and the user comprehensive access to all the customer and vehicle information in a single consolidated Customer 360° view for both the NE DMV users and the online customer portal. It will provide complete details of the customer from the creation of the account through sales and subsequent services. It also allows the customer to edit their personal information, such as addresses and phone numbers.

The Customer 360° view information includes the following items and can be expanded to add more information.

- Customer personal information, including name, address, and contact information
- Vehicles registered under the customer
- Notes related to the customer
- Requests submitted by the customer
- Customer's financial transaction history
- Actions that can be executed by the user/customer on the customer record
- Assets owned by the customer, including their registration plates, vehicles, insurance information, and credentials
- Alerts based on triggers such as unpaid TA or based on upcoming events such as a renewal date

Any change in customer data here will be reflected throughout the system. All changes made to the Customer 360° record will be logged for future auditing. In addition to displaying information, the Customer 360° view can be used to create transactions such as vehicle registration, fee payment, license renewal, and tax return.

The following is a sample customer dashboard that provides a 360° view of the Common Customer, IRP, and IFTA Account information.

omer Dashboard								
	MIEL	K Back T	o Search				M.	20
ustomer Summary		×	IRP Summ	ary				×
LAWYER NURSERY INC			Acco Accoun	unt No. : 3031 Status : Suspe	nded Other	Old Account No.: 3031		
Account No. : 3031	Customer Status : ACTIVE		Fleet No.	Expiration Month / Year	DBA Name		Fleet Status	Total Vehicles
DBA Name : TIN : 810363313	Email : Phone No. : 406 - 826 - 3881		002	6 / 2017			Active	3
USDOT No.: 00052262/ Carrier Type: CARRIER Registrant Type: CORPORATION sst Updated Us NIPURNA3	Ext.: Cell Phone No.: Fax: Last Updated On: 08/30/2016 03:49:57 AM						First Pi	revious 1 Next Last
Physical Address Mailing Addre	ss		IFTA Sumr	hary				
♥ 6625 MT HWY 200 La PLAINS, MT, 598599216 La	ast Updated On: 08/30/2016 03:49:57 AM Ist Updated Us NIPURNA3		Acco Accoun	unt No. : 3031 : Status : Active		Old Account No.: 4155	3	
			License Year	DBA Name				License Status
			2016	LAWYER NUR	ISERY INC			Active
							First P	evious 1 Next Last

Figure 9 360° View Customer Dashboard

CMCS Client Support module provides the functionalities to view application logs, exception logs, and screenshots of errors.

The exception logs functionality in the CMCS solution capture all exceptions in the system. The

captured exceptions are automatically uploaded to the system's exception logs repository.

Below is a sample screen of the CMCS Exception Viewer for NE DMV employees to review when assisting an online customer.

Client Support				Exception Viewer
Search By				
	From Date: 10/09/2019		To Date : 10/09/2019	
			osci ib.	
		Proceed Refresh Quit ?		
Log ID	<u>User ID</u>	Date	App.Type	Action
67698	ID046996	10/9/2019 2:30:23 PM	E	View
67697	ID073710	10/9/2019 2:25:11 PM	E	View
67696	BHARKER	10/9/2019 1:43:31 PM	E	View
67695	ID197561	10/9/2019 10:39:49 AM	1	View
67694	ID197561	10/9/2019 10:15:40 AM	1	View
67693	ID197561	10/9/2019 10:14:59 AM	1	View
67692	DCOOK	10/9/2019 7:46:13 AM	E	View
Showing 1 to 7 of 7 entries				First Previous 1 Next Last

6. BASIC REQUIREMENTS

The objective of this RFP is to select a qualified bidder to satisfy the following project requirements:

- **a.** The solution must be able to:
 - Satisfy all requirements for processing and administration of commercial vehicle apportioned registration under the International Registration Plan (IRP) (for latest version, see https://cdn.ymaws.com/www.irponline.org/resource/resmgr/jurisdiction_info_2/Plan_1_1_1_121.pdf). The solution must be in full compliance with the IRP, the IRP Data Repository, and Nebraska and federal laws and regulations.

Response: Celtic's CMCS COTS Product for IRP System is fully compliant with the IRP plans, including Audit Features and IRP Data Repository Modernization, and is fully PRISM compliant. 20-25% of the existing functionalities need to be configured/ customized to meet NE DMV's rules, regulations, preferences, and uniqueness.

The Celtic IRP system (CTS-IRP) is a comprehensive browser-based COTS product for managing IRP Accounts, IRP registration, credentialing (IRP Cab Cards, Plates, and Validation stickers), and apportionment of fees, giving the NE DMV everything required for processing IRP and Audit business transactions, including new account creation, fleet management, weight group control, vehicle & distance management, error corrections, and audit supplements. Our integrated document management system allows inline scanning/uploading and auto-indexing of required documents collected across the transaction flow. In addition, for renewals, the system handles updates from the previous year in a dual-year situation eliminating the need to re-enter the vehicle data multiple times.

CTS-IRP generates notices to carriers on a regularly scheduled basis, and the system identifies accounts for suspension/revocation.

The Celtic solution provides flexible, external interfacing capabilities to accommodate third-party payment systems, address validation, VIN validation services, and other NE DMV systems.

CTS-IRP audit features allow authorized users to generate a letter of intent, enter audit results, generate audit invoices, and collect payment. These audits will be included in the monthly automated IRP Clearinghouse transmittal.

ii. Satisfy all requirements for processing and administration of commercial motor carrier fuel tax reporting and collection under the International Fuel Tax Agreement (IFTA) (for latest version, see https://www.iftach.org/manual2020.php). The solution must be in full compliance with IFTA, the IFTA Clearinghouse, and Nebraska and federal laws and regulations.

Response: Celtic's CMCS COTS Product for IFTA System is fully compliant with the IFTA plans, including Audit Features and IFTA Clearinghouse house, and is fully PRISM compliant, functionalities that still need to be configured/ customized, includes NE DMV's own rules, regulations, preferences, and uniqueness.

The Celtic IFTA system (CTS-IFTA) is a comprehensive browser-based COTS product for managing IFTA Accounts, IFTA License issuance, decals issuance, quarterly tax calculation, penalty, interest, and fee collection, giving the NE DMV everything required for processing IFTA and Audit business transactions. Our integrated document management system allows inline scanning/uploading and auto-indexing of required documents collected across the transaction flow.

CTS-IFTA generates notices to carriers regularly, and the system identifies accounts for suspension/revocation.

The Celtic solution provides flexible, external interfacing capabilities to accommodate third-party payment systems, address validation, VIN validation services, and other NE DMV systems.

CTS-IFTA audit features allow authorized users to generate a letter of intent, enter audit results, generate audit invoices, and collect payment. These audits will be included in the automated IFTA Clearinghouse transmittal.

Below is the process flow diagram of the CMCS IRP System (for New IRP Accounts, New Fleet, and Fleet Renewal):



Figure 10 CMCS IRP System Flow Diagram

iii. Credential Samples

IRP and IFTA credential samples shall be furnished at the Bidder's expense upon request. Samples not destroyed in testing may be returned at Bidder's expense, if requested.

Response: Celtic understands and shall comply with this requirement.

- iv. Interface and comply with all federal and state systems to satisfy the NE DMV's requirements for:
 - a) The Innovative Technology Deployment (ITD) program (formally CVISN),
 - b) The Performance Registration Information Systems and Management (PRISM) program; and
 - c) A Commercial Vehicle Information Exchange Window (CVIEW) component.

Response: The Celtic Commercial Vehicle Information Exchange System (CTS-CVIEW) is a browserbased application with fully functional capabilities and consists of a responsive architecture with a modernized interface.

State agencies and law enforcement personnel can access CTS-CVIEW from laptops, desktops, and smart devices. CTS-CVIEW supports windows 10, and above with Edge, Firefox, and Chrome web browsers and can be used over mobile units with wireless data communication.

CTS-CVIEW fully complies with the most recent version of the CVISN/ITD (Innovative Technology Deployment) and PRISM architecture defined by FMCSA.

The system uploads new IRP and IFTA registration and license data to SAFER in either a batch mode or it can be configured for real/near real-time updates as per NE DMV's requirements.

Celtic has acquired certification and implemented CTS-CVIEW in seven Jurisdictions (Alabama, Iowa, Georgia, Montana, West Virginia, District of Columbia, Ohio, and Florida – under

construction) for uploads of the T0019-T0022 transaction and downloads of the T0025-T0034, T0041P, and T0042P transactions to/from SAFER. The NE DMV CVIEW will be certified using the most current Interface Certification Processes.

CTS-CVIEW is designed to provide maximum use of configurable components to minimize the need for code changes and minimize IT / vendor participation when business initiatives, legislation, mandates, and other internal and external sources require change.

In summary, we believe we have the knowledge, the experience, the resources, the proven mature methodology, the framework, the platform, the architecture, and the integrated applications to provide NE DMV with a flagship system the State will be able to build on now and in the future.

v. Process separate and combined IRP and IFTA audit functions (see RTM, Appendix A for Option 1, Appendix C for Option 2).

Response: CMCS IRP and IFTA Audit modules allow authorized users the ability to select motor carriers for audit based upon user-defined rules such as account mileage sizing, round numbers for mileage, Nebraska regions, variance in miles reported when comparing the mileage reported on the IFTA tax returns to the corresponding IRP mileage year renewal, last audit date, etc. Audit selection provides a prioritized list of potential carriers that can be used for audit scheduling in the same order over three years.

CMCS Audit module tracks all audit information that complies with the IFTA agreement, IRP Plan, Audit Manual, and procedures manual. The system allows the audit review supervisor to approve or reject an audit for reassessment. The CMCS Audit System provides for multiple levels of approval and will include approvals from Auditors through QA Review.

The system allows for the collection of combined fees for IRP and IFTA Invoices. CMCS provides a set of standard reports, and we will work with the NE DMV team to drive the audit report and required Notice of Audit Results.

vi. Process all related accounting and finance functions (see RTM, Appendix A for Option 1, Appendix C for Option 2).

Response: CMCS provides a financial module that accommodates GL account fee distribution and proper dissemination of accounting information for NE DMV-provided GL account Codes.

All business processes involving financial transactions include a detailed breakdown of fees and taxes based on the transaction type. The system sends the information needed for the finance module to properly allocate the fees and add them to the corresponding revenue accounts.

CMCS automatically adjusts the accounting of fees by reversal, deletion, voiding, and rejection of a financial transaction. Typically, the system posts reversal transactions when the payment has already been posted. Deletion, voiding, and rejection transactions happen before a particular mode of payment has been posted.

For example, if the mode of payment is checked and it is not posted yet, the system supports adjusting it by voiding the transaction. If the payment is by EFT, the user can reject the transaction before it is posted.

After the payment has been posted, the system allows for reversal of the payment when the authorized NE DMV user initiates a refund by issuing a balancing financial transaction (+ or -) by any of the supported modes of payment. CMCS also handles similar adjustments in the cash drawer by using these financial transactions.

CMCS also includes a shopping cart feature. All transactions get added to a cart for processing. Multiple transactions can be added to the cart and paid for using one single payment. The system features provide a complete POS experience with the ability to calculate and track/report fees and process multiple line items on a single order while accepting multiple forms of payment, including cash, check, credit card, debit card, and electronic check.

MCS HEAD OFFICE	Site Map			
Open Business Period: 04/03/2021 To 04/03/2021	Operations / Finance			
0.000020211000000000				
🔹 User Dashboard	Office	Cash Drawer	Reconciliation	Deposit
E Customer Dashboard	Manage Office	Open Cash Drawer	Office Reconciliation	Office Deposit
Q ^e Services >	Update Office	Close Cash Drawer Cash Drawer Inquiry	Adjust Reconciliation Reconciliation Inquiry	Adjust Deposit
Operations ~		Adjust Cash Drawer		
Inventory				
Finance	Payment	Refund	Reprint	System Credit Deposit
User Management	Cart Payment	Refund Approval	Payment Receipt	System Credit Deposit
% Support →	Post Payment	Refund Inquiry	Deposit Statement	IRP Payment Plan
≡ Web Processing >	Same Day Payment Cancellation Payment Inquiry		Combine IFTA / IRP Invoice	Cash Bond Deposit System Credit Inquiry Summer Credit To Before I
				System Credit To Kerund
© 2020 Celtic Systems	INC			(0)
v1.0.0.98918 (04/20/2018) BODEVT	Bond	Reports		
	New Bond	Transaction Inquiry		
	Update Bond	Deposit Financial Summary		
	Bond Inquiry Bond Report	Ledger Credit Processing		
		More +		n B

Below is a sample screenshot of the CMCS Finance System:

vii. Issue Prorate and Fuel 72 Hour permits (see RTM, Appendix A for Option 1, Appendix C for Option 2).

Response: CMCS provides for the issuance of IFTA permits, IRP permits, and combination IFTA/IRP trip permits.

CTS-PARS provides the functionality to issue temporary fuel, registration, and emergency response permits.

Depending on the permit type, the system collects information, including permit duration, size, weight, origin, destination, and commodity type.

Permit fees will be calculated based on permit type and NE DMV-specific business rules. The system allows an external user to pay and generate permits through the self-service portal.

Celtic will discuss the possible use of an e-clearance for oversize or weight loads.

b. Interface and comply with all other NE DMV and State of Nebraska information systems and requirements (see RTM, Appendix A for Option 1, Appendix C for Option 2). The proposed solution should be customer-centric, promote 100% online participation among customers, provide customizability for customer-specific needs as determined by NE DMV, and have the capacity to comply with future updates to IRP, IFTA, ITD, CVIEW, auditing, accounting, financing, document management, and applicable laws and regulations.

Response: CMCS is a browser-base, role-based system that, depending on the role the user has, will be granted access to specific functionality within the system. The CMCS user management module will accommodate the creation of roles for Customers, Third Party Agents, authorized users, other designated departments, and local users, which will be granted based on the functionality they are approved to access.

The CMCS COTS Product's in-built RBAC (Role-Based Access Control) is used to authorize users seeking the information at Navigation Tab Level, Page-level, and Field level.

The data model for the CMCS is designed to render a 360-degree customer view for all the associated entities. The model is designed so that all the transactional data can be linked to a customer number irrespective of whether it is an individual or a business customer.

All the below main entities can be linked to a customer number:

- Enterprise Customer, IRP, IFTA, and Permit Accounts
- Vehicle Registrations
- Vehicle Customer Ownership
- Invoices generated
- Service Transactions
- Payments
- Inventory details

The model will be enhanced based on the detailed analysis of the NE DMV's source systems and future data growth.

Customer 360° View

The CMCS will allow the customer and the user comprehensive access to all the customer and vehicle information in a single consolidated Customer 360° view for both the NE DMV users and the online customer portal. It will provide complete details of the customer from the creation of the account through sales and subsequent services. It also allows the customer to edit their personal information, such as an address, phone number, and preferred language.

The Customer 360° view information includes the following items and can be expanded to add more information.

- Customer personal information, including name, address, and contact information
- Vehicles registered under the customer
- Notes related to the customer
- Requests submitted by the customer
- Customer's financial transaction history
- Actions that can be executed by the user/customer on the customer record

- Assets owned by the customer, including their registration plates, vehicles, insurance information, and credentials
- Alerts based on triggers such as unpaid TA or based on upcoming events such as a renewal date

Any change in customer data here will be reflected throughout the system. All changes made to a Customer 360° record will be logged for future auditing. In addition to displaying information, the Customer 360° view can be used to create transactions such as vehicle registration, citation fee payment, license renewal, and medical screening.

The following is a sample customer dashboard that provides a 360° view of the Common Customer, IRP, and IFTA Account information.

stomer Dashboard								
	MIEL	Back T	o Search				NE	
Customer Summary		×	IRP Summ	ary				×
LAWYER NURSERY	INC		Acco Accoun	unt No.: 3031 t Status : Suspe	nded Other	Old Account No.: 3031		
Account No. : 3031	Customer Status : ACTIVE		Fleet No.	Expiration Month / Year	DBA Name		Fleet Status	Total Vehicles
DBA Name : TIN : 810363313	Email : Phone No. : 406 - 826 - 3881		002	6 / 2017			Active	3
USDOT No.: 000522627 Carrier Type: CARRIER	Ext. : Cell Phone No. :						First Pr	evious 1 Next Last
Registrant Type : CORPORATION Last Updated Us NIPURNA3	Fax : Last Updated On : 08/30/2016 03:49:57 AM							
Physical Address Mailin	g Address		IFTA Summ	nary				×
© 6625 MT HWY 200 PLAINS, MT, 598599216	Lest Updated On: 08/30/2016 03:49:57 AM Lest Updated Us NIPURNA3		Acco Accoun	unt No. : 3031 t Status : Active		Old Account No. : 4155	3	
			License Year	DBA Name				License Status
			2016	LAWYER NUR	SERY INC			Active
							First Pr	evious 1 Next Last

Solution Architecture

CMCS is developed on a Service Oriented Architecture (SOA) with a presentation layer, a business logic layer, an interface layer, and a data layer. The layers are independent of each other in that you can easily make changes to the presentation layer without affecting the business logic layer or the data layer. The data layer can be any relational database engine, including SQL Server, Oracle, and DB2. We have built our solution in both a Java and .Net structure and have chosen .Net Core for this engagement in keeping with the NE DMV environment. The following features and diagram depict our Service Oriented Architecture:

The CMCS Solution is built on multilayered MVC architecture as follows:

- It is multilayered, consisting of the MVC presentation, process, service, and integration layers. This design makes the structure flexible, scalable, and easily maintainable.
- Our Process Layer separates the process and business rules and provides multiple options to implement, either by native code or by using industry-standard rules and workflow engines.

- Our Service Layer contains all the application-specific business logic that will be used irrespective of the access mode. For example, the same application business edit logic is used by an online web interface, web service interface, or batch interface.
- Our Data Layer encapsulates all the database access-related logic
- All interfaces (synchronous/asynchronous, inbound/outbound) are managed through our Universal Interface Controller (UIC).
- Our Presentation Layer provides the flexibility to customize/configure the presentation as per client needs. It accommodates web browsers as well as mobile applications, e-forms, etc.

Below is a schematic of the CMCS solution architecture, including the system, interfaces, and software:



Figure 11 CMCS Solution Architecture Diagram

Each of the solution's key components is explained in the following table:

Component	Purpose
Core Business	This COTS product will be customized and configured to meet NE DMV
Modules	business requirements.
Peripheral Modules	These modules will be part of our integrated CMCS Solution.
Universal Interface	This is the integration adapter available as a part of the COTS solution.
Controller	This adapter provides the integration capabilities to enable data

Celtic Systems V. PROJECT DESCRIPTION AND SCOPE OF WORK

	exchange between the core business modules and the outside systems and channels.
Channels	CMCS is a browser-based solution that consists of a modernized responsive interface that adapts to desktop or handheld devices. CMCS shall be accessed from the user's system with internet connectivity and compatible with standard browsers like Chrome, Edge, and Firefox.
Enterprise	NE DMV Managed systems and services to be interfaced/Connected for
Components	integrations between multiple systems.
Batch Process	Daily, Monthly, and Yearly batch processes that are scheduled to run as per business functions requirements.

Each of the Core Business Modules is explained in the following table:

IRP System	A complete solution for IRP Registration and Credentialing.
IFTA System	A complete solution for International Fuel Tax Agreement (IFTA) registration, credentialing, tax reporting, and auditing.
Permit System	Self-service and agency-issued IRP/IFTA Permitting system.
CVIEW System	Fully integrated with SAFER, integrated solution with IRP and IFTA.
Document Management System	Celtic's Document Management system (CTS-Doc) provides functionality for inline scanning/uploading, indexing, collection, and storage, along with queue management for subsequent batch scanning allowing for mass document collection.
Enterprise Modules	Our COTS solution suite CTS-IRP is modular in design, and common functions like Common Customer, Inventory, and Finance are encapsulated in our Enterprise Module.
Peripheral Modules	Some of the common technical modules are encapsulated in the peripheral modules (Workflow Engine, Business Rules, Fee Estimator, Reports et al.)

c. The Contractor must maintain the solution and all its components for 12 months following the end of the contract and any extension periods.

Response:

Support and Maintenance

RFP No. 6721 Z1 **MMCIS**

As a part of our support and maintenance process, Celtic shall follow a service level agreement (SLA) to provide all necessary ongoing service, support, configurations, system changes, maintenance, issue resolutions, and error corrections.

Celtic will on-board sufficient support teams to satisfy the resolution rate for the first call and to handle high call volumes during the system rollout.

Support and Maintenance management requires defining, following, and monitoring at various levels, Level 1 (L1), Level 2 (L2), and Level 3 (L3) support

Level 1 Support:

The L1 support is through our incident tracking system.

Level 2 Support:

Celtic will provide dedicated technical support personnel for managing both the business and performance aspects of the contract.

Celtic will perform the following activities as part of L2 support:

- Provide a quick First-Level Resolution (FLR)
- Compliance with the response time
- On-time routing of the required incidents
- Resolving common incident types quickly using issue resolution procedures
- Reporting results of root cause analysis to identify stakeholders within defined timeframes for priority incidents
- Prepare status reports and attend a monthly service review meeting

Level 3 Support:

When no resolution is found at L2 support, the Celtic team and the NE DMV team will work together to resolve issues that may involve the NE DMV network.

CMCS provides a fully integrated on-line use guide for all system functions. An online contextsensitive help functionality is also available on all applicable screens. The Frequently Asked Question (FAQ) feature provides users with detailed answers and screen shots to help users through specific scenarios. As and when any changes are done to the system, user manuals and FAQs are updated for the related sections.

Release Management

Celtic will work with the agency to come up with a matrix that will help determine deployment frequency. The matrix will consider various factors such as the type of fix (hot fix / new features/ product upgrade/ maintenance release), severity, the priority of the defect, or functionality to come up with the release frequency.

	Severity	Priority	Frequency	Duration
Hot fix	High	High	Immediate	1 Hr.
New Features	Medium	High	Quarterly	4-6 Hrs.
System Upgrade	Medium	Medium	Depends on the Road map	8-24 Hrs.
Maintenance Release	Medium	Medium	Monthly	2 Hrs.

Here is a typical matrix. This may vary for NE DMV.

B. PROJECT ENVIRONMENT

1. AGENCY

The NE DMV is the State of Nebraska agency charged with the administration and enforcement of motor vehicle regulations. The NE DMV main office is located in Lincoln, Nebraska.

a. NE DMV agency vision

To have quality, accessible, secure services available for all Nebraska DMV customers.

b. NE DMV Agency Mission

Exceptional employees delivering accurate, secure, and innovative services.

Response: Celtic is a product company focused on Motor Carrier and Motor Vehicle space with a full product suite to address all functions of the agency. Celtic products have been installed and running in more than 18 jurisdictions in North America for more than 18 years. We at Celtic are happy to participate in the State of Nebraska's journey to modernize NE DMV's Motor Carrier Information System (MMCIS) that shall support NE DMV's vision and Mission.

2. COST

The entire cost of the solution will be paid upon completion of Deliverables and benchmarks (as solely determined by NE DMV) throughout the duration of the contract and any extensions.

Response: Celtic has read, and we shall comply with, this payment and deliverables clause.

3. TIMELINE

This is a multi-year project expected to consume a significant number of staff hours for the NE DMV, MMCIS stakeholders, and the Contractor. While the NE DMV expects the implementation timeline to be achieved by March 1, 2024, bidders may specify a preferred timeline in the Bidder Response Matrix (see Appendix B for Option 1, Appendix D for Option 2).

The NE DMV has developed an approach based on budgetary authorization and organizational change management principles. A multi-year project such as this modernization can bring radical change to an organization; applying effective change management can increase the probability of a successful project and manage resistance to change.

Anticipated project completion dates are as follows, with finalized dates to be determined in the Project Management Plan:

April 1, 2023: Project start date
December 1, 2023: User Acceptance Testing environment becomes available to NE DMV for testing purposes
January 15, 2024: User accounts established, and training starts (internal for NE DMV)
March 1, 2024: MMCIS fully operational with all document management functions enabled

The Contractor shall solicit and incorporate NE DMV input early and often throughout the life of the project. NE DMV staff will be available to work on this project according to percent dedication described in this section. When developing the Project Management Plan, Contractor shall take into consideration workload information as provided in the Interface Catalog (Appendix A for Option 1, Appendix C for Option 2).

Response: Celtic has the capability and experience to implement the modernization of such volume and complexity in twelve months. Based on our experience, we have learned that such an aggressive schedule will add load on the agency's users for timely review and approval of deliverables.

As desired by NE DMV, we have provided a twelve-month project implementation schedule with a start date of April 1, 2023, but we recommend an implementation period of eighteen months.

4. **ON-SITE EXPECTATIONS**

All work shall be completed in Lincoln, NE, within the office space provided by the NE DMV, unless alternative arrangements are approved by the NE DMV. The NE DMV will rely primarily on the Contractor to lead the implementation of their solution. On-site work expectations will be determined by the Contractor and NE DMV. The State will provide the following for the Contractor:

- **a.** State of Nebraska email account(s) may be provided to the Contractor upon request and approval by the NE DMV, based on need for all project communication.
- **b.** VPN access to the appropriate portions of the state network.
- **c.** Office space.

Response: Celtic proposes a hybrid approach to the logistics with both onsite and offsite teams working to deliver the modernization solution to NE DMV. These teams will be located based on the type of work performed and the level of interaction required with the NE DMV business and IT teams.

Typically, requirement-gathering sessions will be performed at the state offices as much as possible to enable participation from the NE DMV team. Some of the development and testing work will be done by Celtic team members from offsite locations in the CONUS region.

Celtic will deliver the training and transition services done at state sites. Celtic will have a core team on-site for two weeks for the maintenance and operations stabilization phase. The support and maintenance service will be provided remotely from our AZ office with regular virtual status meetings.

Phase	Onsite (NE)	Offsite (AZ)	Global
Requirements/ JAD Sessions	Project Manager Functional Team	Architecture Team	

Design & Architecture	Project Manager Architecture Team (Travel)	Architecture Team	
Configuration & Customization	Project Manager COTS Team (Travel)	COTS Team QA Team	Product Factory
System Integration Test	Project Manager COTS Team (Travel)	QA Team COTS Team	QA Team COTS Team
User Acceptance Test	Project Manager COTS Team (Travel) QA Team (Travel)	QA Team COTS Team	QA Team COTS Team
User Training	Project Manager Training Team (Travel)	Training Team (online)	Training Team (Content)

Celtic will obtain a State of Nebraska email account and VPN access for the project work. During on-site visits, Celtic shall utilize allocated office space.

5. **OFFICE SPACE**

The NE DMV is prepared to provide office space for up to 10 Contractor team members to allow the Contractor and NE DMV to be co-located on-site through the design, development, testing, training, implementation, and deployment phases of the project to be determined by the NE DMV. NE DMV intends to provide adequate office space which will house workspaces, testing, training and meeting facilities.

a. Each workspace will include:

- i. Office furnishings (desks, chairs, etc.)
- ii. Individual Windows computer with dual monitors

b. The office space will include:

- ii. A shared copier/printer/fax machine
- ii. Standard office supplies

Any additional or special office equipment, computers, monitors, desk arrangements, or office supplies needed by the Contractor will be the responsibility of the Contractor to coordinate and provide.

Response: Celtic has read and understands the workspace and office space provisioning by NE DMV for this project.

6. PROJECT TEAM AND GOVERANCE STRUCTURE

The project anticipates having two teams operational throughout the lifecycle of the project: an Executive Support Team and a Core MMCIS Team. The project will be overseen by the Core MMCIS Team and Executive Support Team. The Core MMCIS Team will lead all efforts and tasks and will report to the Executive Support Team. The Core MMCIS Team will serve as subject matter experts for the project.

Response: Celtic understands and shall comply with NE DMV's recommended project team and governance structure.

We recommend a project governance model built around proven program management principles, emphasizing clear and timely communication and decision-making. Model designed to ensure full collaboration across all tracks in scope for the engagement. This will create a shared vision/understanding of program objectives, plans, risks, issues, and changes and facilitate consensus in multi-level planning, with clearly defined roles and responsibilities, agreed-upon work methods, and transparency in communication. This model maximizes engagement with stakeholders while minimizing overlapping agendas. It also ensures a complete understanding of intra and inter-program dependencies.

Celtic recommends the following organization chart to deliver NE DMV MMCIS based on our experience in past implementations of our product suite.



Figure 12 MMCIS Project Organization Chart

The below table gives the detailed roles and responsibilities of Team Celtic:

Roles	Responsibilities		
Executive Sponsor	 Overall accountability for the Business Process activities (definition, validation, and sign-off). Responsible for the overall program strategy, scope, budget, and timeline 		

	Responsible for Strategic cross-functional alignment & dependencies for other IT initiatives
Engagement Manager	 Establishes project standards and processes Responsible for the overall quality of services provided Review business and risk issues related to the project with NE DMV Review and finalize project plans, schedules, and budget Participate in project executive meetings Manage Celtic internal Quality Assurance (QA) review process Assess the effectiveness of resources, organizational structure, and roles Make sure the project is functioning effectively Responsible for NE DMV contract management and amendments, as necessary Serve as a primary point of contact for NE DMV/ITS project executives Serve as a primary point of contact to NE DMV key project staff prior to project initiation
Program Manager	 Point of Contact (POC) from Celtic, who will be a business controller for this project. Primary responsibility to connect portfolio to enterprise strategy The Program Manager will work closely with the NE DMV contracting team and NE DMV PMO to make scope change decisions and make sure that all project milestones are met Works with Celtic functional, technical, and development managers to review and monitor project status

7. RELATIONSHIP WITH THE NEBRASKA OCIO

The Nebraska Department of Motor Vehicles partners with the Nebraska Office of the Chief Information Officer for the agency Information Technology needs. The OCIO manages the entire State network including hardware and access. Any changes that need made to the network will require their approval. The OCIO also provides networking, firewall, server and workstation support to the DMV and all other agencies in the State of Nebraska.

All workstations and servers are joined to the STN domain. This is the State of Nebraska's domain.

Response: Celtic understands and shall comply with this requirement.

8. ANTICIPATED NE DMV PROJECT PERSONNEL

The Contractor will form a partnership and work closely with the NE DMV throughout implementation of the solution. The Contractor may also work with other State of Nebraska personnel, such as staff from the Nebraska Office of the Chief Information Officer (OCIO). Table 1 provides a breakdown of NE DMV staff who are anticipated to work on the project, their role, anticipated level of involvement, and type of assistance provided to the Contractor's staff. This information is presented for bidder planning and budgeting purposes.

Table 1. NE DMV project team and governance structure				
Role	Minimum %	Assistance provided	Project Team Assignment	
	dedicated			
	to project			

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FTE Application Developer (1)	80%	AS400 data migration and new system knowledge transfer	Core MMCIS team
FTE Application Developer (1)	50%	System development	Core MMCIS team
FTE Information Technology Manager (1)	50%	Resource management	Executive Support Team Core MMCIS Team
FTE Infrastructure Support Analyst (1)	75%	VM environment, hardware rollouts, and other infrastructure support	Core MMCIS Team
FTE Subject Matter Experts (4)	50%	MMCIS project and subject expertise, new system knowledge transfer	Core MMCIS Team
FTE Project Manager (1)	50%	MMCIS project matter expertise -	Core MMCIS Team Executive Support Team
FTE Project Administrator (1)	80%	MMCIS project and subject matter expertise, new system knowledge transfer	Core MMCIS Team
FTE Information Technology Business Analysts (1)	100%	MMCIS testing and support - Core MMCIS team	Core MMCIS Team
FTE Subject Matter Expert (1)	10%	Accounting expertise	As needed

Response: Celtic understands and shall consider NE DMV proposed resource availability during the project implementation period. During the project implementation period, if additional support of any resource is identified, Celtic will discuss it with the NE DMV project management team and work on a mutually agreed plan.

9. CRIMINAL BACKGROUND CHECKS

The NE DMV reserves the right to require any employee of the Contractor who will be employed for this project, have access to the buildings occupied by the NE DMV / State of Nebraska, or will have access to personal or sensitive personal information, to submit to a criminal background check. Any Contractor's employee who has access to specific personal or sensitive personal information as specified by the NE DMV or state or federal law will be required to submit to a fingerprint-based state and federal criminal background inquiry through the FBI's National Crime Information Center (NCIC) database. The Contractor is responsible for any costs associated with the criminal background checks and the fingerprint-based state and federal background inquiries. If a fingerprint-based check is required, the NE DMV will assist with arranging such a check. All other checks are the responsibility of the Contractor.

Response: Celtic understands and shall comply with this requirement.

10. OFF-SHORE DEVELOPMENT AND HOSTING OF STATE DATA

The NE DMV requires production data to remain within the computer environment hosted by the State of Nebraska. The NE DMV prefers development of applications for the NE DMV remain within the United States. A Contractor choosing to develop the application outside of the United States will be required to provide detailed documentation on the security and quality assurance processes to protect integrity of the solution to the NE DMV. The NE DMV reserves the right to accept or deny any offshore development by the Contractor.

Response: Celtic understands and shall comply with this requirement.

Celtic has developed a proprietary Agile Methodology for delivering Modernized Solutions to its client jurisdictions. It typically involves teams distributed globally with a defined Work Breakdown Structure and split responsibilities. Here are the three prominent geographic locations involved

On-site: Client/ Jurisdiction team + Celtic Implementation Team

During the implementation, the Celtic team will spend time with the NE DMV team to drive out the detailed project plan, gather and validate requirements, discuss progress/ status, demonstrate product capabilities, resolve issues, conduct testing, etc.

Offsite: Celtic Implementation Team + Celtic Architecture Team + Celtic Data Team

This team resolves core management, design, and architectural issues. This team drives the whole program and makes necessary NE DMV-specific configurations, modifications, and customizations to the CMCS product required to deliver the desired solution.

Resources experienced in our products may travel from our global product engineering factory to our office in Scottsdale, AZ, as required to assist with making jurisdiction-specific product changes.

Onsite/ co-location with client/ jurisdiction teams has become rare due to the pandemic and work-from-home culture. Travel restrictions have limited our abilities to supplement our offsite team with key resources from our global Product Engineering Factory.

Global: Celtic Core Product Engineering Factory

Our Product Engineering Factory (based in India) is where most of the product updates/ modifications to the core CMCS COTS product happen as designed by the Celtic Team in the US. The global team will make any required changes to the core CMCS COTS product.

11. DELIVER DOCUMENTATION

The Contractor shall deliver all documentation in a format which is editable by NE DMV staff and appropriate for the size and complexity. All documentation shall be developed using the same tools and similar formatting structures to maintain standards across all documentation Deliverables. The Contractor shall furnish the capability, including licenses for any specialized tools, for the NE DMV to update all documentation and convert existing policy manuals into the same format. The Contractor shall develop and keep all documentation, specialized tools, and support tools synchronized and updated until the Warranty period has been completed.

Response: Celtic understands and shall comply with this requirement.

Celtic proposes the following tools and technologies for performing the development, customization, and configuration management processes of our COTS Products:

Tools proposed in the Implementation Phase					
Activity	Sub-Activity	Tools Used			
Plan	Project Management activities, including Change Requests, Backlog and Documentation tracking, and maintenance items	 Azure DevOps with Agile project templates MS SharePoint for document repository MS Project 			
Code	Code Development	Visual Studio/CodeEclipse			

	Tools proposed in the Implementation Phase				
	Code Analysis	- Visual Studio Code Analysis			
	Automated Unit Testing	- Unit tests			
	Gated Commit with Continuous Integration	- GIT in Azure DevOps services			
	Automated Build Verification Testing	 Azure DevOps integrated test management and execution 			
	Inspection of code quality	- SonarQube			
Deploy	Deployment via Continuous Delivery	 Azure DevOps CI/CD pipelines 			
	Simultaneous Deployment for Multiple Environments	 Azure DevOps CI/CD pipelines 			
	Deployment Artifacts	- Azure artifacts			
	Operations & Maintenance	e Phase			
Support	Issues/ Ticket management	- JIRA Service Desk			

C. SCOPE OF WORK

The scope of work includes planning; development; testing; data cleansing, conversion, and migration; training; implementation; deployment; maintenance; and support of the solution. This includes the software and personnel services necessary for implementation of a modern, user-friendly MMCIS which meets the ever-increasing demands for improved customer service and expanded functionality.

The design, development, and configuration of the system shall be accomplished in a single deployment which encompasses multiple release components as described in Table 2.

A Release is a building block of software functionality and components that, collectively, creates a full software program. There will be two Release groups and nine components as displayed in **Table 2**:

Table 2. Releases					
Release Group	Release Component	Projected Activation Dates			
Release 1:	1. IRP	March 1, 2024			
MMCIS integrated with all	9. IFTA				
document management functions	 Sales Tax collections 				
	11. Auditing				
	12. Collections				
	Accounting and finance				
	14. Permitting				

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	15. Integration with document management functionality (either Option 1: Integration with Contractor's document management system; or Option Integration with ECM)	
Release 2: Activation of Advanced Services	1. Staggered IRP registration	Date to be determined by NE DMV and Contractor, anticipated to be in early years of the contract.

Advanced Services functionality will include one component: fully functional capabilities for staggered IRP registration. Advanced services are anticipated to be designed and developed in concert with the MMCIS but may have delayed activation dates. The projected activation date of staggered IRP registration is unknown but anticipated to occur within the first seven years of the contract. The projected activation dates in the table above are desired by the NE DMV, but alternative dates, mutually agreed upon with NE DMV can be discussed.

Response: Celtic understands and shall comply with this requirement.

CMCS IRP System provides out-of-the-box staggered IRP registration with a configurable key to turn on/off the feature.

THE MMCIS MODERNIZATION PROJECT IS DIVIDED INTO THREE SEGMENTS

a. Segment 1: Project Planning and Management

The Contractor will manage the project from beginning to end, utilizing project management best practices to keep the project in-scope, within budget, on-time, and in compliance with all requirements.

b. Segment 2: Perform Implementation

The Contractor will plan, design, develop, and configure the solution. The Contractor shall detail, in written plans, how it will approach and execute key activities such as Gap Analysis, Training, Data Cleansing, Conversion and Migration, and Testing. The Contractor will fulfill the plans in cooperation with the NE DMV.

c. Segment 3: Warranty, Maintenance and Service Level Agreement

The Contractor must provide support to the solution and all its components for the duration of the contract. This includes software updates and providing technical support and training where appropriate.

The solution will fulfill all requirements included in this RFP. All requirements are found in the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2). Bidders must respond to each requirement in the Requirements Traceability Matrix and submit an updated and completed Requirements Traceability Matrix with its proposal. Bidders must also respond to each item in the Bidder's Response Matrix (Appendix B for Option 1, Appendix D for Option 2), and submit the completed Bidder's Response Matrix with their proposal.

Data Quality

The Contractor, with the assistance of the NE DMV, is responsible for legacy data conversion into the new system, including validating data quality and, to the extent possible, resolving data quality issues. If any data quality issues cannot be resolved, the Contractor shall document such instances and submit options for NE DMV's consideration.

Response: Celtic understands and shall comply with Segment 1, Segment 2, Segment 3, and Data Quality Requirements.

1. SEGMENT 1: PROJECT PLANNING AND MANAGEMENT

Project Management is ongoing for the duration of the contract. The primary objective of project management is to plan, manage, and control the timely and accurate completion of all tasks and

Deliverables. The Contractor shall develop, manage, and execute the Project Management Plan according to project management best practices.

The Contractor shall comply with and provide support to NE DMV processes and collaborate with the following Project Teams: 1) an Executive Support Team; and 2) a Core MMCIS Project Team.

The NE DMV has established guidelines and processes for managing this modernization project. The NE DMV is open to any suggestions, improvements, and best practices which the Contractor can provide to help reduce risk, improve process and Deliverable quality, and support the overall success of the project. Changes to these processes and guidelines will be made at the State's sole discretion, after consideration of any Contractor recommended changes.

Response: Celtic uses the People-Process-Technology construct to come up with management strategies/ key success factors for all product implementation programs.

People

Celtic shall deploy a seasoned Project Manager with extensive experience in managing similar projects and motor vehicle agencies as a single point of contact.

Celtic will also ensure the constant availability of the product engineering team to help the implementation team and the users. This is a Best Practice from our earlier implementation successes.

Process

Our recommended governance framework is built around proven program management principles, with an emphasis on clear and timely communication and decision-making.

The Governance Structure recommended by Celtic is organized along multiple tiers. Interaction and communication channels between the tiers, their respective key accountabilities, and the frequency of their execution are represented in the figure below:



Figure 13 MMCIS Project Governance Structure

Executive Steering Committee: People at this level will provide thought leadership and vision and help resolve any escalation issues from the program management committee. Celtic team members at this level will be non-billable.

Project Management Team: People at this level will ensure effective engagement across stakeholders. They will help monitor, control, and report the status, SLAs, risks, status, budget, changes, communication plan, and resources to manage and ensure the program's success.

Project Team: Members from this team need to be available as per the agreed plan for sharing the information, knowledge transfer, and discussing the functions, process, tools, data, and measurements for in-scope applications with the Assessment team.

a. Frequency and Evolution of Project Management

The NE DMV will work with the Contractor to determine the most practical and effective approach to project management which will evolve over time (collaboratively with the Contractor) to meet the needs of the project. The project management activities will be dynamic. The project management responsibilities described in this section represents a minimum set of required tasks and Deliverables. The NE DMV will set the standards for project management responsible for complying with the identified project management standards as submitted in its response and agreed to in the Contract.

Response: Celtic proposes the following production provide project management activities that we have successfully in project modernization with similar size and complexities that of NE DMV's MMCIS:

Step 1 – Sandbox delivery

Celtic will deliver the AS-IS version of the product in a Sandbox environment. This enables the system users to get familiar with our CMCS COTS Products.

Step 2 – Joint Application Development (JAD) Sessions

Celtic functional team works with the NE DMV team (typically product and business owners and team members), where the Celtic team demonstrates the current system's capabilities and notes down any requests for configuration/ customization.

Step 3 – Delivery sprints

Celtic implementation team splits these configuration/ customization requests into a series of Agile Sprints of two (2) weeks each.

These sprints are then clubbed into *Program Increments (PI-s)*, at the end of which the Sandbox Environment is updated. This helps the NE DMV team evaluate the implementation's progress and resolve any issues. We believe this is another *innovative strategy and a key differentiator* for Celtic.

Step 4 – System Integration Testing and User Acceptance Testing

Celtic does both these critical evaluations in a collaborative model with its clients – where all the testing, triaging, and root cause analyses are done together. This collaborative technique reduces the chances of communication gaps and subsequent delays. We believe this collaborative technique is another *innovative strategy and a key differentiator* for Celtic.

Step 5 – User Training

Celtic uses its own iLearn[™] product that supports multi-media content with multi-mode delivery (On line, Classroom, and self-learning) with the provision for tracking the progress of each user's knowledge level. We believe using iLearn[™] is another *innovative strategy and a key differentiator* for Celtic.

Celtic makes the following assumptions for successful product implementation and support programs:

- Availability of NE DMV resources per mutually agreed plan
- Timely communication, including approvals, response to queries, providing review comments, closure of open issues, etc.
- Availability of well-documented web services and APIs required to interface with CMCS

b. Proposal and RFP Review Meeting

The Contractor is responsible for performing project start-up activities and developing project planning documentation as described below within 30 days of the start of the project. The Contractor shall:

i. Schedule and conduct a meeting with the NE DMV and Contractor team to review proposed scope and approach for the project.

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- ii. Incorporate all RFP and contractual documents into the review.
- iii. Provide an agenda 10 calendar days in advance of the meeting.
- iv. Obtain approval of agenda five calendar days in advance of the meeting from the NE DMV.

Response: Celtic understands and shall comply with this requirement.

c. Project Kickoff

The Contractor shall plan and deliver kickoff meeting(s) within 60 days of the start of the project to engage and coordinate with the NE DMV. These meetings may be scheduled in a format mutually agreeable to both the NE DMV Project Administrator and the Contractor. For the kickoff meeting(s), the Contractor shall:

- i. Present an overview of the Project Management Plan and the manner in which project activities will be executed.
- **ii.** Provide a presentation to include a Work Breakdown Structure (WBS), High Level Roadmap, and all other materials needed to detail the approach and preliminary activities for project implementation.
- iii. Provide an agenda 10 calendar days in advance of each meeting.
- iv. Obtain approval from the NE DMV of agendas five calendar days in advance of each meeting.
- v. Provide presentation materials to meeting attendees and an electronic copy to the NE DMV Project Manager.

Response: Celtic will onboard its staff to the project and conduct a Project Kickoff meeting. The I3-Celtic team will initiate the work on the key planning deliverables such as Project Management Plan and the Project Work Plan. The base CMCS products will be deployed in a sandbox environment as part of the initiation and planning activities.

Sprint 0:

The First Initial sprint, i.e., Sprint 0, will be consumed for project planning, initiation, scope identification, Epic to user stories creations, knowledge gathering, infrastructure setup, and all other generic activities setting the base for the development sprint to start from sprint 1.

The key activities, deliverables, and signoff criteria are explained in the table below.

Activities Involved	Key Deliverables	Sign-off criteria
Sprint 0		
 Conduct a kick-off meeting with the stakeholders Ensure detailed Product backlog with user stories for functionalities is available Start requirement workshops Create Test Management Plan Create Data Conversion Plan Create Training Plan Finalize the solution architecture 	 Product backlog created Project Kick-off meeting 	 Signoff of the below deliverables at the agreed- upon timeline: Project Management Plan Test Management Plan Data Conversion Plan Training Plan

Expectations from the NE DMV:

- State Organization structure with key roles such as State Project manager, Lead Functional SME, Lead Technical SME, Scrum Master, Product Owner, etc., published with Celtic team names.
- Infrastructure team support for the environment, connectivity, and access setup.
- Publish high-level state requirements for the modules
- Participate in the requirements meetings with Celtic. It is assumed that the State Product owner will have the list of detailed requirements ready before the start of the project. During the initiation phase, the user stories/product backlog will be finalized by the State Product owner and Celtic team.

d. Project Management Plan

The Contractor shall prepare and deliver an initial Project Management Plan and timeline for delivery of updates for the entire Project Management Plan and its sub-plans as identified below within sixty (60) days of the start of the project. The Contractor, at a minimum, shall complete the following tasks:

- i. Develop, maintain, and follow an NE DMV-approved Project Management Plan consistent with project and Project Management Body of Knowledge (PMBOK) standards addressing all of the project management requirements in this RFP.
- ii. Periodically review the Project Management Plan and its subsections for any updates which may need to be applied during the execution of the Contract.
- iii. Document and share any assumptions made during the creation of the Project Management Plan, including any of the subsections.
- iv. Collaborate with the NE DMV Project Administrator and NE DMV Project Manager to incorporate all best practices and approached into the Project Management Plan and its subsections.
- v. Keep the Project Management Plan and its subsections current to reflect best know information and lessons learned throughout the execution of the project.
- vi. Develop a high-level roadmap to organize and depict the approach for managing and executing the project, including planned development/implementation milestones.
- vii. Meet all project requirements as described in this RFP.

Response: Celtic will leverage Project Management's best practices applicable to the Agile framework. Celtic will onboard a seasoned Project Manager with extensive experience in managing similar projects. The Project Manager will work in collaboration with the NE DMV project manager counterpart from the start of the project through go-live while working with NE DMV to track and ensure the quality throughout the project duration and to ensure that the program is delivered on time and within budget. The Project Manager will be supported by the Functional team, Development, and PMO team to ensure the successful execution of the Agile releases.

The below diagram provides a 3-tiered governance view, with stakeholders involved and a focus on outcomes.

The Celtic Project Management framework (based on the Project Management Institute's PMBOK) will be used to plan and execute this program. The framework organizes project management processes into four main phases linked by the results they produce—the result or outcome of one becomes an input to another. It provides for well-defined deliverables, entry and

exit criteria, and activity definitions in each of these phases.

The four main phases follow a rigorous structure to plan, execute, control, and close the nine Project Management core processes as depicted in the picture. The Project Management Office (PMO) manages the processes. The four PMO phases are specific to project management and can be applied to any Project Lifecycle model.

What	Who	Cadence	Outcomes
Portfolio Value Steams Strategic Themes Epic Discovery Budget/Funding	Steering Committee	 Quarterly or as decisions are needed 	 New value targeted Prioritized epics Understanding of MVP Investment decisions
 Program Program backlog Group of 5 sprint teams Architectural runway Simple budgets 	 Project Manager and PMO / RTE Product Management System Architects SME and Leads 	• Program Increment	 Value Achievement Commitment (Current PI) Alignment Release on demand
Team Team backlogs Develop on cadence Stories, spikes, refactoring Traditional sprint teams 	 Development team Scrum master Product owner 	• 2 week sprints	 Working software – value delivered Code quality Continuous release

Figure 14 Project Management Core Processes
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A process-centric perspective is provided to the Project Management framework by the nine core processes of Scope, Time, Cost, Quality, Resource, Communication, Risk/Issue, Performance, and Vendor Management.

These core process areas are aligned with the Agile execution framework.

- **Scope Management:** Scope Management ensures that the project includes all the work required to complete it successfully. Key Scope Management activities include:
 - 0 Prioritize Portfolio backlog
 - 0 Split epics, prioritize features
 - 0 Prioritize Product backlog
 - 0 Prioritize team sprint backlog
- **Time Management:** Time Management ensures the timely delivery and completion of the project. Key time management activities include:

- 0 Fixed Sprints and Program Increment durations
- 0 Frequent backlog grooming
- 0 Prioritize user stories
- 0 Observed team velocity
- 0 User stories sized based on Agile estimation techniques
- 0 Team members commit to the sprint backlog
- **Cost Management:** Cost Management ensures that the project is completed within the approved budget. Key cost management activities include:
 - 0 Plan Agile Release Train (ART) Funding
 - o Allocation based on customer demand
 - 0 Determine the Agile Release Train budget
 - 0 Control costs at a Program Increment boundary
- **Quality Management:** Quality Management ensures that the project adheres to the quality standards as planned. Key Quality management activities include:
 - 0 Definition of ready
 - 0 Behavior-driven development (BDD) / Test-driven development (TDD)
 - 0 Continuous integration
 - 0 Definition of Done / Pair testing
- **Resource Management:** Resource Management ensures the most effective utilization of resources for the project. Key Resource management activities include:
 - o Evaluate team capacity
 - 0 Dedicated teams assigned
 - 0 Retrospectives and continuous learning by teams
 - 0 Self-organized teams
- Communication Management: Communication Management ensures an ongoing cycle of collecting and disseminating project information. Key Communication management activities include:
 - 0 Setting up a Governance model for the program
 - Identify business owners

- Align to a common vision
- Frequent collaboration and team agreements
- 0 The daily stand-up meeting, sprint demos, and retrospective meetings
- 0 Publish work status
- 0 Highly collaborative environment; lean portfolio metrics published regularly
- **Risk & Issues Management:** Risk & issues Management identifies, analyzes, and resolves project risks and issues. Key Risk & Issue management activities include:
 - 0 Deliver in small increments; mid Program increment reviews
 - 0 Fishbone and 5 Why techniques to analyze impediments
 - 0 Regular Scrum of Scrum meetings to identify impediments
 - 0 Swarm and proactively resolve impediments
- Integration/Performance Management: The Release Train Engineer (RTE) and the PMO team capture agile metrics at period intervals to track the progress of the agile release train. The metrics are captured at sprint, release, and project levels.
 Representative metrics include:
 - 0 Sprint Velocity
 - 0 Sprint Defect density
 - 0 Release Productivity
 - 0 Release defect density
 - 0 Release effort variance
 - 0 Project Productivity in story points
 - 0 Project defect density
 - 0 Project schedule variance
- Procurement/Vendor Management: Procurement/Vendor Management ensures the acquisition of services and goods for successful project completion. Key Procurement management activities include:
 - 0 Establish strategic relationships
 - 0 Develop business partnerships
 - 0 Align with Lean and Agile practices

0 Close contracts

Project Management Requirements

Celtic will complete all project management activities according to project standards.

- 1. Develop, maintain, and follow a state-approved Project Management Plan consistent with project and EPMO standards that address all the project management requirements in this RFP.
- 2. Periodically review the Project Management Plan for any updates that may need to be applied during the execution of the contract, and those updates must be discussed with the state and mutually approved by both parties.
- 3. Document and share any assumptions made during the Project Management Planassociated deliverables creation.
- 4. Collaborate with the state and its representatives to incorporate all best practices and approaches into the Project Management Plans.
- 5. Keep the Project Management Plan current to reflect the best-known information and lessons learned throughout the execution of the project to improve project execution.
- 6. Develop a high-level roadmap to organize and depict the approach for managing and executing the project, including planned development/implementation milestones.
- 7. Meet all project execution requirements as described in this RFP and elaborated in the contract deliverables approved by the state.
- 8. Promptly develop a mitigation plan for any project schedule slippage.

Finalize Project Processes and Templates

i.

After the contract award, within the first weeks of the project, the Celtic management team will meet with the state's Project Manager and leaders to review the state's processes and templates (e.g., change management, deliverable review and approval, risk, and issue management) and the document repository.

Celtic will use this information to document and get approval for the processes and templates used on this project and maintained during the contract.

Celtic will deliver the following: Project Management Plan, Project Processes, Project Templates, including Status Reporting templates, and Project Repository. All deliverables must be approved by state staff to be considered complete.

The Project Management Plan shall include the following subsections i-vi:

<u>Scope and Change Management</u> The Contractor shall develop, present for approval, and execute a subsection for defining and managing project scope, and for tracking progress toward completion.

This subsection shall include the following:

- a) All documentation and work products, once the scope and schedule are agreed upon by the NE DMV Project Administrator and NE DMV Project Manager, shall be subject to the agreed-upon change management process.
- **b)** The Contractor shall create and update a Master Project Schedule and Work Breakdown Structure (WBS) approved by the NE DMV as part of the change management process.
- c) The Contractor shall document all Deliverables within the WBS.
- **d)** The WBS shall clearly define all project Deliverables, whether they are created by the Contractor, a Subcontractor, or the NE DMV.
- e) The Scope and Change Management section shall reflect all Change Order processes identified.

Response: Celtic will deliver the Scope and Change Management Process/Template/Tools in consultation with and subject to the agency's change management process.

Celtic will develop, present for approval, and execute a process for defining and managing project scope and tracking progress toward completion.

- 1. Celtic will update the work breakdown structure (WBS) and Master Project schedule approved by the state as part of the change management process. Any changes to scope shall be approved in advance by the state as defined in the approved project change management process.
- 2. Celtic will document all project deliverables within the WBS.
- 3. Celtic will work with State to define change request documentation within the agreed project repository, to include, at a minimum:
 - a. Reason for change;
 - b. Impact of the change on the scope and schedule;
 - c. Dependencies;
 - d. Cost of a change request; and
 - e. Risk of not doing the change
- 5. Celtic will obtain the Change Control Board's approval of any change request prior to acting on it.
- 6. Celtic will update relevant project artifacts.

ii.

- Master Project Schedule and Schedule Management The Contractor shall develop, present for approval, and execute a subsection for creating, maintaining, and managing the Master Project Schedule and any subsidiary schedules. The Contractor will create and maintain, subject to NE DMV approval, the Master Project Schedule.
 - a) All project schedules shall include Contractor and NE DMV project tasks. The Contractor shall obtain input and approval on NE DMV project tasks before finalizing schedule publishing. The Contractor may not commit State resources to timelines or tasks without NE DMV participation and approval of the schedules. The Contractor shall provide one month of calendar lead

time (or other mutually agreed timeframe) to ensure the appropriate resources are available.

- b) The Contractor shall document all Deliverables within the WBS.
- c) The WBS shall clearly define all project Deliverables, whether they are created by the Contractor, a Subcontractor, or the NE DMV.
- d) The Contractor shall use Microsoft Project to maintain all project schedules. The Master Project Schedule shall be reviewed with the Core MMCIS team weekly, or as determined by the NE DMV Project Administrator and NE DMV Project Manager.
- e) The Contractor shall develop and provide Gantt charts and other progress tracking tools, such as dashboards, to convey the status of the project.
- f) For reporting purposes, the NE DMV requires a detailed Master Project Schedule be summarized into a dashboard or at a level of detail appropriate for overseeing and managing the project. Different levels of reporting are required for different levels in the organization (e.g. Project Manager vs. Executive Support Team).
- **g)** The Contractor shall gain approval from the NE DMV Project Administrator and NE DMV Project Manager before publishing modifications to the schedules.
- h) Derivative schedules or sub-schedules shall be compatible and consistent with the Master Project Schedule, linked to it, and rolled up into the Master Project Schedule.
- i) Project schedules shall follow PMBOK project management practices. Project schedules shall clearly define dependencies, resource requirements, and the critical path of tasks. All project schedules shall include appropriate milestones approved by the NE DMV Project Administrator and NE DMV Project Manager to allow for the overall tracking of project progress.
- j) All task durations and review cycles shall be calculated in State working days, not calendar duration of days. State of Nebraska and federal holidays shall also be calculated as non-working days.
- k) The Contractor shall at all times develop and propose project schedules it believes are realistic and properly manage risk. Schedule delays which are not mutually agreed to as being caused by the NE DMV will not be considered for a change order nor additional compensation or consideration to the Contractor.
- I) The Contractor shall develop a project schedule based on the phased delivery of modules and release components. The Contractor shall provide an initial schedule and shall submit a revised schedule whenever there is an approved modification in the requirements or Deliverables throughout all phases of the project.

Response: Celtic will develop, present for approval, and execute a plan for creating, maintaining, and managing the Master Project Schedule and any subsidiary schedules. Celtic, in consultation with the state, will ensure that:

- 1. Project schedules include Celtic and state tasks
- 2. Celtic will provide a mutually agreed timeframe to ensure that the appropriate state resources are available

- 3. Celtic proposes Microsoft Project to maintain all project schedules. The Master Project Schedule shall be reviewed with the state weekly or as determined by the state.
- 4. Celtic will develop and provide progress tracking tools such as Gantt charts or dashboards to convey the project's status.
- 5. For reporting purposes, Celtic will summarize a detailed Master Project Schedule into a dashboard or a level of detail appropriate for overseeing and managing the project. Different levels of reporting are required for different levels in the organization (e.g., PM, Executive).
- 6. Celtic will gain approval from the state before publishing modifications to the schedule baseline.
- 7. Celtic will divide the entire project into sub-projects. These sub-project schedules shall be rolled into an overall Master Project Schedule and dashboard, whereby the state and Celtic can track and manage overall resource utilization and task dependencies.
- 8. Following PMI PMBOK best practices, Project schedules will clearly define dependencies, resource requirements, and the critical path of tasks. If appropriate, no task shall be longer than eighty (80) hours in duration. The project Schedule shall include appropriate milestones in consultation with the state to allow for overall project progress tracking.
- 8. Celtic will incorporate the state's working days as part of the project calendar to ensure that all task durations and review cycles are calculated in state working days, not calendar days.
- 9. Celtic will develop and propose realistic project schedules and properly manage risk. Schedule delays that are not mutually agreed to as being caused by the state will not be considered for a change order nor additional compensation or consideration to Celtic.
- 10. Celtic will develop a project schedule based on the phased delivery of modules and releases. Celtic will provide an initial schedule and shall submit a revised schedule whenever there is an approved modification in the requirements or deliverables throughout all phases of the project.
- 11. Celtic will use project standards for the development of all schedules.
 - iii. Resource Management Plan

The Contractor shall develop, present for approval, and execute a subsection for management of its resources on the project. The Resource Management Plan shall include:

- a) Project organizational structure.
- **b)** Role and responsibility assignments including percent of time allocated to assignments.
- c) Staffing plan describing when and how staff will be brought onto and transitioned off the project team, retention, and where staff will be located.
- d) Job descriptions and background profiles experience in related areas.

- e) Training needs.
- f) Details on required support from the NE DMV.

Response: As part of initiation activities, Celtic will work with the state to define Project Organization Chart, RACI Chart, and Resource Transition Plan.

Celtic will develop, present for approval, and execute a plan for the management of its resources on the project. The Resource Management Plan shall include the following:

- 1. Project organizational structure;
- 2. Role and responsibility assignments using a RACI (responsible, accountable, consulted, and informed) chart;
- 3. Description of when and how staff will be brought onto and transitioned off the project team, including knowledge transfer; and
- 4. Identify any required state activities which will help the state allocate the appropriate resources in alignment with the project plan/sub-plan.
- 5. Work collaboratively with the state on the substitution of Key Personnel during the contract term.

iv. <u>Communications Management</u> The Contractor shall develop, present for approval, and execute a subsection for communication and stakeholder management.

- a) The Contractor shall work with the NE DMV Project Administrator and Project Manager to identify stakeholders, communication needs, communication activities, and mechanisms.
- **b)** Project information for dissemination to the public, NE DMV staff, and all other MMCIS teams and stakeholders shall be coordinated with and approved by the NE DMV Project Manager prior to dissemination.

Response: Celtic will develop, present for approval, and execute a plan for communication & stakeholder management.

- 1. Celtic will work with the state to identify stakeholders, communication needs, communication activities, roles, and mechanisms.
- 2. The Communications Plan and all communication artifacts shall comply with state standards.
- 3. Celtic will work with any state Organizational Change Management Teams to assist with developing communications and training.
- 4. Project information for dissemination to the public, state or project staff, and business partners shall be coordinated with and approved by the State Project Manager prior to dissemination.

v. <u>Risk and Issue Management</u>

The Contractor shall develop, present for approval, and execute a subsection for risk and issue management.

- a) The Risk and Issue Management Plan shall include identification of probable risks, mitigation and remediation strategies, as well as the risk and issue repository.
- **b)** The Contractor shall follow an established risk and issue escalation process (e.g., a Problem Escalation Procedure (PEP), and/or Service Level Agreement (SLA) to foster communication for relevant stakeholders.
- c) The Contractor shall develop and actively manage a Risk Log and Issue Log to be updated no less frequently than biweekly.
- d) The Contractor shall obtain input on a regular basis from project stakeholders as defined in the Risk and Issue Management Plan.
- e) The Contractor shall track project and development risks and issues and assess potential changes to the project scope as a result of mitigation.
- f) The Contractor shall be responsible for documenting, tracking, and managing to resolution all risks and issues related to the project.
- **g)** The Contractor shall work with the NE DMV to review the design of the tracking systems and make necessary modifications to support the project.

Response: Celtic will develop, present for approval, and execute a process that uses the state's defined tool/templates for risk and issue tracking, reporting, and management, **including:**

- 1. The Risk & Issue tracking shall include the identification of probable risks, mitigation, and remediation strategies in the approved risk and issue tool/templates.
- 2. Celtic will follow the established risk and issue escalation process to foster communication for relevant stakeholders. Collaboratively, NE DMV will work with Celtic to define the specific escalation path and reporting requirements after the contract award.
- 3. Celtic will update the risk and issue tool/register at least bi-weekly with input from project stakeholders and their assessment of project impacts and include risks and issues as part of status reporting.
- 4. Celtic will be responsible for documenting, tracking, and managing to resolve all issues and risks related to the project.
 - vi. <u>Meeting Management</u>

The Contractor shall develop, present for approval, and execute a subsection for managing and documenting all project meetings.

- a) The Contractor shall be responsible for developing and distributing minutes of all meetings.
- **b)** The Contractor shall post these minutes to a designated folder in the agreed upon document repository within 48 hours of the meeting.
- c) The NE DMV will review and approve all minutes.

Response: Celtic will develop, present for approval, and execute a Meeting Management plan for managing and documenting all project meetings.

- 1. Celtic will be responsible for developing and distributing minutes of all meetings in an agreed format.
- 2. Celtic will post these minutes to an agreed shared workspace within forty-eight (48) hours of the meeting.
- 3. The state will review and approve all minutes.

e. STATUS MEETINGS AND REPORTING

The Contractor is responsible for performing project status meetings and reports as described below.

- i. Weekly Core MMCIS Project Team Status Meetings
 - a) The Contractor shall meet at least weekly with the Core MMCIS Project Team to report project status.
 - **b)** The Contractor will conduct a project review during the meeting (e.g., a review of resources, schedule, issues, risks, procurements, and all other items relevant to the project).
 - c) The Contractor shall review key issues and risks weekly or on another schedule as determined by the NE DMV Project Administrator or Project Manager.
 - d) The NE DMV will set the agenda and facilitate these meetings or may delegate these responsibilities to the Contractor.

Response: Celtic will meet with the state project leadership team weekly or as agreed frequency to report status.

- 1. Celtic will conduct a project review which, at a minimum, shall include, delivery status, issues and risks, and resources.
- 2. Celtic will review key issues and risks weekly or on another schedule as determined by the state.
- 3. The state will set the agenda and facilitate these meetings or may delegate these responsibilities to Celtic.
 - ii. Monthly Executive Support Team Meetings
 - a) On a monthly basis, the Contractor shall meet with the Executive Support Team to report project status.
 - **b)** The Contractor shall provide an executive level project review (e.g., resources, schedule, issues, risks, procurements, and all other items relevant to the project) that may require executive attention.
 - c) The NE DMV will set the agenda and conduct these meetings or may delegate these responsibilities to the Contractor.
 - d) Additional executive status meetings may be required during the execution of the project.

e)

The NE DMV and Contractor will mutually agree upon the Contractor's obligations for making changes and implementing decisions.

Response: On a monthly basis, as mutually agreed upon, Celtic will meet with the state executive management team to report the status.

1. Celtic will provide an executive level project review (e.g., resources, schedule, issues, and risks) highlighting items that require executive attention.

2. Celtic will work with the state to provide required updates and agendas and conduct these meetings as needed.

> iii. Bi-Weekly Written Status Reports

The Contractor shall submit status reports to the NE DMV Project Manager once every two weeks on a day mutually agreed upon by the NE DMV Project Manager and Contractor. The proposed format and level of detail for the status reports will be subject to the approval by the NE DMV Project Administrator and Project Manager. The report shall include, at a minimum, the following:

- Accomplishments over the reporting period. a)
- b) Status for new or previously identified risks.
- Issue status for new or previously identified issues. c)
- Key activities over the next period. d)
- e) Schedule for the next period's activities.
- f) Deliverables anticipated to finish in the next period.
- Deliverables anticipated to start in the next period. g)
- h) Identification and justification of any proposed adjustments in the schedule, resources, scope of work, costs, or other aspects of the Project Management Plan.
- i) Identification of schedule delays and recommended corrective action plans.

Response: Celtic's Project Manager shall submit status reports to the state every week or as mutually agreed upon by the state and Celtic. The proposed format and level of detail for the status reports will be mutually agreed upon. The report shall include, at a minimum, the following:

- 1. Overall project status, including any required mitigation for deviations from the project plan;
- 2. Accomplishments over the reporting period;
- 3. Risk status for new or previously identified risks to any aspect of the project;
- 4. Issue status for new or previously identified issues to any aspect of the project;
- 5. Action item log;
- 6. Key activities over the next period;
- 7. Deliverables expected to finish in the next period;

- 8. Deliverables expected to start in the next period;
- 9. Identification and justification of any proposed adjustments in the schedule (time), resources (staff), the scope of work, costs, or other aspects of the project;
- 10. Identification of schedule delays and recommended corrective action plans;
- 11. Performance reporting based on agreed metrics; and
- 12. Status and inputs to state-required audits.

iv. Project Tracking

The Contractor shall maintain an up-to-date log of the following project managementrelated items:

- a) Project Issues Log: The Contractor shall maintain a log of known disputes or impediments to project progress.
- **b)** Project Change Log: The Contractor shall maintain an up-to-date list of pending, approved, and denied change orders.
- c) Project Risk Log: The Contractor shall maintain an up-to-date risk log of known or possible risks that may impede project progress.
- d) Project Action Items Log: The Contractor shall maintain an up-to-date action items log.
- e) Project Decision Items Log: The Contractor shall maintain an up-to-date list of decisions made.

Response: Celtic team has performed these management activities on multiple successful projects in multiple jurisdictions. Our typical agenda for status meetings consists of a Cadence spreadsheet having multiple sheets to address the following:

- Dashboard High-level status of the project showing a color-coded representation of:
 - o GREEN Project is on track no action necessary
 - YELLOW Project indicators show some areas of concern; however, a corrective action plan is in place to maintain the schedule and bring it back to GREEN.
 - RED Escalation Indicator. The project is off-schedule, and there is no plan to bring it back on track. Needs dedicated management involvement in building a cure plan to resolve the issues and return the statutes to GREEN asap.
- Action Items allows you to assign actions and track them through to completion.
- Risks and Mitigation Log provides a means of recording the identified risks, analyzing their severity, and taking the necessary management actions.

- Issues Log list of issues that arise in a project and prioritize a response to them.
- Change Control Log used by the project team to log and track change requests during the project implementation phase.
- Parking Lot used when a discussion is going a bit too deep, taking the team off track, and not applying to everyone.
- Project Schedule listing activities, deliverables, and milestones within a project.
- Team Contacts contact information of the project team responsible for contributing to the overall objectives and specific deliverables.
- Cutover contact list contact information of the project team involved in the cutover activities.
- Cutover list the series of tasks that are performed to deploy the components from the Pre-production environment to the Production environment and activate them.

f. APPROVAL OF DELIVERABLES

The Contractor is responsible for following the Delivery Approval Process. Deliverables shall be provided to the NE DMV for approval. The Contractor shall provide an electronic copy and two hard copies of each finalized written Deliverable. The Contractor shall ensure Deliverables have met the following criteria prior to submission for approval:

- i. In compliance with all Contract requirements.
- ii. Completed within the timelines outlined in the approved project schedule.
- iii. Consistent with industry best practices in terms of Deliverable completeness, clarity, and quality.
- iv. Provide consistency between Deliverables, where applicable.
- v. Presented in a format appropriate for the subject matter and depth of discussion.
- vi. Organized in a manner which presents a logical flow of the Deliverable's content.
- vii. Represents factual information reasonably expected to have been known at the time of submittal.
- viii. Contains proper grammar, spellings, punctuation, and structure.

If the Contractor needs to revise the planned Deliverable of in-scope requirements across work products and Deliverables, the Contractor shall perform this revision at no additional charge to the NE DMV, when such revision is not a result of NE DMV delays. Significant changes to the baseline project schedule shall take into consideration the impact to the NE DMV for extending the schedule. The Change Order Process shall be utilized, when applicable.

Response: Celtic will discuss and finalize with the NE DMV modernization team the list of deliverables before the start of the engagement. Celtic will submit the deliverables for MMCIS review within the agreed-upon timelines and as expected by NE DMV.

Below are the key expectations from the NE DMV modernization team to facilitate the timely creation, submission, and approval of deliverables.

a. Review and timely approval of deliverables by the NE DMV modernization team.

- b. Participate in requirements/functional design workshops with the Celtic teams.
- c. Provide infrastructure team support for the environment, connectivity, access setup, issue resolution, and migration/deployment across test regions.
- d. Provide clarification on the functional understanding of legacy applications.
- e. Provide as-is documentation of the existing legacy system, process flows, and business rules.
- f. Create a product verification backlog with Celtic's functional SMEs with a list of features to be taken up during the sprint development.

g. DELIVERABLE ACCEPTANCE PROCESS

Deliverables shall be accepted or rejected by the NE DMV within the timeframe as agreed upon as part of the Project Management Plan. The NE DMV shall be granted adequate time to review the document(s). Documents which are larger, complex, and require review by numerous stakeholders shall have a longer review time than those which do not.

The Deliverable Acceptance Process is described as follows:

i. Working Draft: The Contractor shall provide a working draft of the Deliverables to the NE DMV no less than 30 calendar days prior to the submission deadline. The intention of the working draft is to provide opportunity for communication between both parties to aid in the development process for Deliverables acceptable to both parties.

The submitted working draft Deliverable may contain limited structural errors such as incorrect punctuation and shall represent a significant level of completeness and shall comply with the practices required for each Deliverable upon submission. If not, the NE DMV may return the working draft Deliverable and the review timelines will reset.

- **ii.** Submission of Deliverables: The NE DMV and Contractor will mutually agree on the format and use of a Deliverable Acceptance Form (DAF).
- **iii.** Assessment of Deliverables: The NE DMV representatives will determine whether the Deliverables meets the requirements as defined per the contract.
- **iv.** Approve/Rejection: After reviewing the submitted Deliverable, the NE DMV will either approve or reject the Deliverable.
 - a) Approval: The NE DMV will sign and date the DAF and return it to the Contractor.
 - b) Rejection: If rejected, the NE DMV will communicate in writing any Deliverable deficiencies or non-conformities to the Contractor. The communication will describe what shall be corrected prior to the resubmission of the Deliverable in sufficient detail for the Contractor to address the deficiencies. If desired by either party, a meeting will be held within three business days from date of rejection found on the DAF.
- Correction of Deliverable: The Contractor will correct deficiencies in the Deliverable as identified by the NE DMV. The Contractor will submit a schedule for making changes to the Deliverable within two business days of receipt of rejection of the Deliverable or meeting.

Once the Contractor corrects all previously identified problems, the Deliverable will be resubmitted for acceptance by using an updated DAF. The full approval and rejection process will begin.

- vi. Invoice: In order for an invoice to be processed for payment, it shall be accompanied by a signed DAF for each Deliverable listed on the invoice.
- vii. Monitoring and Reporting: The Contractor will track Deliverable approval and rejections. Updates on Deliverable(s) will be included in the status report and discussed in the status meeting with the MMCIS Core Team. Deliverable approval issues which cannot be resolved will be elevated to the Executive Support Team.

Response: Celtic will discuss and finalize with the NE DMV modernization team the list of deliverables before the start of the engagement. Celtic will submit the deliverables for MMCIS review within the agreed-upon timelines.

Below are the key expectations from the NE DMV to facilitate the timely creation, submission, and approval of deliverables.

- a. Review and timely approval of deliverables by the NE DMV MMCIS modernization team.
- b. Participate in requirements/functional design workshops with the Celtic teams.
- c. Provide infrastructure team support for the environment, connectivity, access setup, issue resolution, and migration/deployment across test regions.
- d. Provide clarification on the functional understanding of legacy applications.
- e. Provide as-is documentation of the existing legacy system, process flows, and business rules.
- f. Create a product verification backlog with Celtic's functional SMEs with a list of features to be taken up during the sprint development.

Celtic has proven expertise in helping clients with document and configuration management. Celtic will build alignment of various artifacts with respect to configuration management planning, scoping, and execution. We will primarily follow the processes listed below to ensure control of overall configuration management is implemented at every stage.

- Aligning new projects with existing documents and configuration management processes already followed in Manitoba Public Insurance.
- Bringing best practices from other engagements and enhancing the process.
- Build a configuration management plan that includes both code and non-code artifacts (such as documents) at the beginning of the project
- Ensure artifacts are always stored in a central location in a version-controlled environment such as SharePoint. The repositories will allow the team to store, organize, and distribute software artifacts, as well as source code
- Define a workflow for different types of artifacts
- Define a clear release path for different types of artifacts to ensure every team member is referring latest version of the document
- Use tools to automate the processes and bring further efficiency

- Develop a configuration management-specific checklist to be followed during internal audits
- Have a separate team/sub-team to oversee the approval tracking and invoicing process.

h. **PROBLEM ESCALATION PROCEDURE**

The Contractor is responsible for providing information for and following the Problem Escalation Procedure (PEP). Contractor must provide and maintain a PEP for both routine and emergency situations throughout the full contract including design, development, implementation, deployment, warranty, and maintenance services. The PEP must state how the Contractor will address problem situations as they occur during the performance of the Contract, especially problems which are not resolved to the satisfaction of the NE DMV within appropriate timeframes.

The Contractor shall provide alternative contact information to the NE DMV Project Administrator and Project Manager, should the identified Contractor representatives not be available.

The Contractor must provide the PEP no later than 30 calendar days after contract execution. In addition, the PEP, including any revisions, must be provided within 30 calendar days after the start of each new contract year and after any change in circumstances which changes the PEP. The PEP shall detail how problems will work under the Contract and how they will be escalated in order to resolve any issues in a timely manner. The PEP shall include:

- i. The process for establishing the existence of a problem.
- **ii.** The maximum duration a problem may retain unresolved at each level of the Contractor's organization before automatically escalating the problem to a higher level for resolution.
- iii. Circumstance in which the escalation will occur in less than the normal timeframe.
- iv. The nature of feedback on resolution progress, includes the frequency of feedback to be provided to the NE DMV.
- v. Identification of, and contact information for, progressively higher levels of personnel in the Contractor's organization who would become involved in resolving a problem.
- vi. Contact information for person(s) responsible for resolving issues after hours of operation and on an emergency basis.
- vii. A process for updating and notifying the NE DMV Project Administrator and Project Manager of any changes to the PEP.

Response: To track and monitor the project's health, Celtic recommends a project governance framework designed to ensure full collaboration across all tracks in scope for the engagement. This will create a shared vision/understanding of program objectives, plans, risks, issues, and changes and facilitate consensus in multi-level planning, with clearly defined roles and responsibilities, agreed-upon work methods, and transparency in communication. This model maximizes engagement with stakeholders while minimizing overlapping agendas. It also ensures a complete understanding of intra and inter-program dependencies.

Our recommended governance framework is built around proven program management principles, emphasizing clear and timely communication and decision-making.

The Governance Structure recommended by Celtic is organized along multiple tiers. Interaction and communication channels between the tiers, their respective key accountabilities, and the frequency of their execution are represented in the figure below:



- *Executive Steering Committee*: People at this level from both sides will provide thought leadership and vision and help resolve any escalation issues from the program management committee. Celtic team members at this level will be non-billable.
- *Project Management Team*: People at this level from both sides will ensure effective engagement across stakeholders. They will help monitor, control, and report the status, SLAs, risks, status, budget, changes, communication plan, and resources to manage and ensure the program's success.
- *Project Team*: Members from this team need to be available per the agreed plan for sharing the information, knowledge transfer, and discussing the functions, process, tools, data, and measurements for in-scope applications with the Assessment team.

i. SYSTEM IMPLEMENTATION/PERFORMANCE PLANNING AND MANAGEMENT

The Contractor shall provide planning documentation for System Implementation/Performance. The objective is to plan, manage, and control the timely and accurate completion and approval of all tasks and Deliverables focusing on System Implementation/Performance.

The Contractor shall develop plans to manage and execute the steps required for full System Implementation/Performance. The Contractor is responsible for drafting, developing, incorporating NE DMV and OCIO comments, and finalizing the following plans for testing and system implementation as described below:

i. Data Plan (Data Cleansing, Migration and Conversion)

The Contractor shall provide a Data Plan for the conversion of electronic data from the legacy motor carrier services system to the MMCIS to achieve all data management functions. The plan shall cover tasks such as data conversion, cleansing, migration, synchronization, etc. The plan shall provide all necessary data conversion specifications. The detailed specifications for data conversion, migration, cleansing, and synchronizing activities shall be approved by the NE DMV before initiation of these activities. The Contractor will be assisted by the NE DMV with data cleansing, data mapping, identification of legacy data to be migrated, and conversion of the data from the legacy data sources to the MMCIS and integrated document management system.

The Data Plan shall include:

- a) Conversion Process: A description of the conversion process, record handling, inventory control process, and quality control activities.
- b) Errors: An outline of common errors and resolutions from previous conversion efforts.
- c) Risks and Risk Mitigation: An outline of identified risks and how the Contractor proposes to mitigate such risks.
- d) Roles: A description of roles and responsibilities for the Contractor and NE DMV.
- e) Schedule: A detailed activity schedule and timeline for all processes contained in the Data Plan.
- f) Data Cleansing: Identification of data in the legacy system to be cleansed as part of the migration process.
- **g)** Data De-duplication: A description of the process for normalizing data which is not currently normalized. (Note: The same data element is often stored in multiple locations. If these locations contain different information, the data should be reconciled and resolved).
- h) Data Migration: As business functions move to the MMCIS, any corresponding business data should be moved from the legacy system to new system.
- i) Data Synchronization: A description of the process for synchronizing data between the legacy and test system.
- j) Data Quality: A description of the data quality process, which answers all elements included in data conversion, cleansing, and migration.
- k) Single Customer Record: A description for the creation of a single customercentric record for all available programs and services
- Contractor's Overall Data Plan: Each major step anticipated in data conversion, cleansing, migration, and synchronization processes and any other relevant areas.

The Data Plan, at a minimum, shall include details contained in **Table 3** for transformation or migration of data:

Table 3. Minimum Data Plan details			
Detail	Description		
Source	Source Location (e.g., System/File/Database Table)		
Source Data Element	Source Data Element Identifier (e.g., SSN)		
Destination	Target Location (e.g., Database Table)		
Target Data Element	Target Data Element Identifier (e.g., Member ID)		
Transformation / Cleansing Rules	Describe data transformation that is to occur, including any data		
Notes	Describe any timing constraints or anything unique about conversion.		

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The Data Plan shall anticipate not all data records will be programmatically converted. The Contractor shall provide or develop any tool or user interfaces allowing NE DMV staff to manually complete or reconcile those records on a case-by-case basis. In the Data Plan the Contractor shall, at a minimum:

- a) Describe the strategy to be used to ensure data quality before and after all data conversions.
- **b)** Describe the approach to data cleansing and quality assessment of data before migration.
- c) Describe the manual and/or automated controls and methods to be used to validate the conversion and to ensure all data intended for conversion has been converted.
- d) Describe the process for data error detection and correction.
- e) Describe the process for resolving data anomalies.
- f) Audit, history, and roll-back capability for all identified data quality problems.
 g) Identify the types of data quality problems which may occur, including but
 - Identify the types of data quality problems which may occur, including but not limited to, the following considerations:
 - **1).** Data type redefinitions (e.g., alphas in dates and numbers, embedded information in codes and intelligent keys, implied content)
 - **2).** Garbled content (e.g., multiple uses for a single field, free form text values, corrupted data, un-initialized data)
 - Invalid record relationships (e.g., broken chains in set relationships, orphan records [on natural key], mismatched keys [set vs. natural key])
 - **4).** Invalid content (e.g., values out of defined range, code fields not on a valid list of values or lookup table, blank fields [optionality], inconsistent use of defaults).

Response: Celtic has performed data migration efforts for many clients, including some that have "homegrown" data in various formats, and converted it to our information database format. We will work with the state implementation manager to ensure the integrity and validity of the data. The below diagram depicts the various layers in the data migration development environment and the stages the data goes through prior to migration to the target system.



Figure 15 Data Migration Conceptual Model

The following steps are performed as part of Data Migration Development. Celtic carries out steps five through six, whereas the State executes steps one through four.

- Copy the data from the source into the landing zone raw layer DB
- Consolidate and cleanse the data into load ready staging area
- Perform data quality checks, reprocessing, fix data gaps per policies, and identify authoritative data
- Push to load ready staging in the agreed layout
- Celtic will follow the security policies of the State. Apply policies and data reconciliation
- Perform data conversion and load data from load-ready staging to MMCIS

Activities performed and resources involved:

The overall scope of data migration (steps given above) includes extracting data from legacy systems and authoritative source identification, transforming and loading the data to the target system, agreed to processes, and system definition. Multiple teams are involved in performing these activities.

The State is responsible for bringing the data from the respective source systems, cleansing the data, identifying authoritative data, and publishing the same to Celtic. Celtic will source this data, transform it to acceptable MMCIS standards, and load it to the MMCIS system.



Figure 16 Data Migration Flow

Both of these teams also will maintain a mapping document to provide traceability of data elements. The State will maintain a mapping document tracing the data lineage from the source systems to the load-ready staging. Celtic will maintain a mapping document that traces data movement from load-ready staging to the MMCIS schemas.

The data migration team primarily consists of members from the following organizations.

State:

- Data architect
- Systems architect
- Infrastructure and security SME

Celtic:

Solution architect

- Data architect/lead
- DBA

Artifacts addressing data conversion, migration, and synchronization requirements:

Listed below are the artifacts which will be delivered in accordance with the State's requirements:

• Data migration and conversion plan and discovery phase deliverable.

This document will explain the conversion and migration approach, big bang vs. incremental, and detail the data conversion and migration plan, data mapping specifications, data loading standards, process reporting, job statistics standards, cut-over process, notification standards, unit test plan, release documents, data quality report and data reconciliation report

Document the cluster-wise approach where each cluster represents a domain, such as IRP, IFTA, Tax, Permit, DMS, etc., to MMCIS.

• Data model and data dictionary – discovery phase deliverable

CMCS OOTB data model and data dictionary will be shared with the State's team so that load-ready schema will be created based on the same.

- Data synchronization approach discovery phase deliverable
- ETL detail-level design for job creation

This document will capture the ETL job design, which will extract the data from load-ready staging, perform the necessary transformations and load the MMCIS target tables.

This design also includes the audit and reconciliation job designs which helps to prepare the reconciliation reports and document the unit test plans for the ETL jobs.

• Data migration and conversion CMCS OOTB scripts

CMCS OOTB scripts which will be used for the post-conversion execution report.

Data mapping specifications

Celtic will maintain a mapping document that traces data movement from load-ready staging to MMCIS schemas. The data-mapping document may contain the following information: target schema name, target entity name, target element name, source schema name, source entity name, source element name, transformations applied (if any)

• Data migration and conversion test results

Celtic QA team will validate MMCIS with the migrated data to make sure the new system performs the functionality in accordance with the State's requirement after execution of the ETL jobs.

Data Migration and Conversion progress reports

During data migration/conversion – the data not loaded due to an error is written back to the write-back table with the detailed error, which the State will investigate and fix at the

source. This report helps the State to identify how many records are migrated to MMCIS and how many are in progress based on the migration criteria

- Release documentation
- The list of ETL Jobs, along with the schedule for execution, shall be provided.

Approach for data conversion, data migration, data quality analysis and resolution, and data synchronization:

Our execution approach is contextualized, based on the best practices and past experiences of successful implementations of data migration framework, which is depicted below:

Tracks Requiren Manager	ments ment Migration Strategy and Architecture Definition	Data Mapping, Data Extract and Data Profiling	Design	Build and Test	Migration Execution
Technology Track Data Quality Assurance Assurance	rent state ormation d migration s rements ogy ctional remain s rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ogy ctional rements ctional rements remets rements rements remets remets remets remets remets re	 Understand target data model and create upload format Data mapping from source to target Source data extract Data profiling and analysis Identify data issues that need cleansing applicable across Tranches 	 Create detailed design : data mapping and transformation rules Design audit & reconciliation Incorporate Data Profiling and Analysis Design and plan tests Ensure scalability and reuse for next tranches 	 Build migration components using industry and <client> standards</client> Unit testing and component integration testing Carry out Mock migrations to gain higher confidence Assure quality through exhaustive functional testing and UAT 	 Implementation planning, step by step implementation plan Carry out Dress rehearsals to simulate the migration scenario Migration execution Issue resolution and migration stabilization in the intensive care period

Figure 17 Data Migration Execution Approach

- Determine the approach based on client business and functional requirements between the big bang and incremental load.
- Provide more focus on source data assessment and its quality
- GAP analysis and rectification of gaps.
- Re-assess the existing load –granularity, frequency, and archival requirements and maintain only the required thresholds during ETL phases
- Validate the history of incidents against the current loads. Identify the pattern and proactively fix them in all applicable/unnoticed areas
- Re-validate the current 'as-is' design, data model, data loads, and overall schedule and look for more optimized ways of implementation in 'to-be' migration.
- Decommission the unnecessary- data flows, data loads, and landing zones

- Handle the migration limitations through a work around approach implementation using a combination of to-be technology
- Break the migration into multiple phases through the logical grouping of applications/interfaces based on source/target systems, complexity, etc. That will eventually help in structured and successful migration releases.
- Document the data mapping from staging schema which is based on the common data model to target schema and obtain sign-off.
- The development will be in iterations where the first iteration will utilize the common data model, and the subsequent iteration will implement the customizations on the common data model in accordance with the State's functional requirements.
- Implement the latest or path-breaking features as applicable during development which will help develop the latest industry standards components.
- Deploy best practices, re-usable artifacts, automated tools, and accelerators as applicable across SDLC phases of migration which will help in productivity improvements
- Conduct parallel testing as is vs. to be components run to validate and compare the data results accuracy and performance benchmarking
- Low latency is achieved through increased performance in job processing, optimized job scheduling, and fine-tuned infrastructure for managing data loads.
- Production-like data (PHI masked production data) to be used for building a new system and mock migrations to be performed in the pre-production environment with production data.
- Encourage collaboration and communication among teams and team members.
- Follow standardized procedures, terminologies, and guidelines.
- Timely closure of questions and data issues.
- Ensure that data changes to the legacy production platform are captured and migrated to the new platform.
- Repeated mock migrations iteratively using production data.
- Attempt to migrate data/entities touching multiple subject areas early on in mock migrations to uncover any data inconsistency
- Deploy MMCIS application on migrated (mock) data in test environments for early verification.

The below sections list the activities that will be performed by Celtic based on insights gained from the past/previous implementation to ensure the success of the NE DMV data conversion/migration implementation.

• Determine the load sequence:

The data in Load ready staging needs to be extracted, organized, and loaded into the MMCIS system. The data in Load ready staging will be analyzed and identified by the nature of data into different categories like the master, transactional, historical, etc. (Shown in the diagram above). Master data may be transferred first, then transactional, and then historical/audit data. The exact load sequence will be determined during data migration development.

• Perform legacy vs. MMCIS data transformation:

The MMCIS system may follow a set of configuration/code values different from the existing legacy systems. Hence the data from the legacy need to be transformed into a new set of values using conversion logic. This transformation logic will be reviewed with the State and sign-off and will be used while migrating the data from Load ready staging to the MMCIS schema.

For example, the legacy system may use codes '1' and '0' to indicate Active and Inactive status, whereas the MMCIS system may use values 'A' and 'I'. This transformation logic will be captured in mapping and signed off by the State.

The data extracted by the ETL tool from Load ready staging may be loaded into a workspace(optional) and then transformed per business rules/logic applied and loaded into the MMCIS schemas. The data lineage may include this additional step in mapping.

• Perform data reconciliation process:

Celtic will ensure all valid data from the load-ready staging is migrated into the target system during the final production migration. Data reconciliation reports will be created and published to the stakeholders identified by the data governance committee or modernization PMO (project management office). These data reconciliation reports will be created during the mock migrations during the development phase of the project as well. This will help refine the data reconciliation process, mature the same, and indicate the expected outcome during the final production migration.

The reconciliation reports can contain the following:

- o List of key entities
- Number of records for the entity in load-ready staging, for example, the number of IRP Accounts
- o Number of records loaded into the target system
- o The number of records rejected
- Number of records violating a given rule, for example, referential integrity (as applicable)
- Discuss and document migration reversal strategy:

A data migration reversal strategy works as a backup plan if things go unexpected or yield unexpected results. In case of data migration, for any reason, the phase 1 migration is called off, the target data could be deleted, and the legacy source system will be brought back to resume execution. • Discuss and document cut over approach:

The cutover is creating and executing the cutover plan to deploy the solution into production. The cutover plan for data migration should be created in alignment with the cut over plan for the entire program. This plan will include owners and signoffs responsible for conversions and verification and what conversions are required for their type during and sequence.

• Deployment confirmations:

The assumptions are confirmed prior to the final deployment:

- The state business unit is ready for changes with the new system, including changes to business activities
- Disabled the "update" capability in the old legacy systems, which will be replaced by the MMCIS system the old system is now used for inquiry purposes only
- Final conversion activities are known and tracked during the conversion weekend
- o Deployment resources and assignments will be communicated and understood
- Identified the final decision meeting attendees. These resources determined the final go/no-go decision
- The state will provide service/help desk procedures post-conversion.
- Conduct final data conversion steps:

The data cleansing activities will be reviewed before the final deployment to determine if all cleanup activities have been performed. The desired approach is to correct all identified data problems before extracting the final conversion data from the old systems. However, there may be instances where it is impossible to clean up all data before converting to the new system. In this instance, changes in the final deployment activities will need discussion and agree-upon changes approved by the State. The final deployment/cut-over plan will require State acceptance of the converted data.

• Discuss and document cutover to production:

The final cutover to production will be managed using a table (checklist) with all scheduled and backup activities. This plan will identify the resources required for approval of the individual tasks with the ultimate approval by the State.

The production cutover plan will be executed over a period that will include detailed input from the other plans and areas:

- o Data conversion plan
- o Training plan
- o Testing plan
- WBS (work breakdown structure)
- PVD (product verification document)
- ICD (interface control document)

The final readiness review will be a checklist that will ensure the required areas have provided their agreement to proceed with the cutover to the new system. The cut-over checklist provides a list of items for the execution of all related activities.

The net result of these activities is the "go/no go" decision to move forward with the final steps of the transition or to back out gracefully and remedy any issues prior to a subsequent transition.

• Confirm transition phase complete:

Conduct post-cut-over diagnostic and lessons learned. The final acceptance of the production system follows this. As part of the transition, there could be fixed or enhanced items after the initial cut-over, and a timeline will be laid out for any remaining post-transition activities.

• Recommended contingency plan:

The recommended contingency plan will be to "roll-back" and use the existing state IRP, IFTA, Permit, and Tax related systems in case of any "showstopper" issues are identified during deployment. The method of roll back and reentry of any transaction into the legacy State system depends on the amount of time that has transpired from MMCIS go-live to the point at which the rollback is initiated. It is recommended that a contingency/rollback plan be developed by State (with Celtic help). Any roll back plan should be of extremely short duration (a day at most), as any transactions executed during the rollback plan may have to be re-created manually.

• Discuss and document data quality strategy:

The State legacy data loaded into the Load ready staging layer is expected to have undergone a data quality check and certified by the State. Celtic will produce data reconciliation reports to review and ensure that this data available in publish layer is consumed by the data migration scripts and appropriately loaded or rejected (if it violates key rules). The proposed solution may have additional code/scripts to validate and identify duplicates or other validation scenarios to maintain data integrity throughout the data migration process. As part of this broader strategy team, Celtic may perform both unit testing and usability testing, as detailed below.

- Fixing source data quality issues
 - <u>Migration unit testing</u>: The main purpose of conversion unit testing is to verify whether migration scripts adhere to mapping specifications and to ensure that the converted data produced by these scripts are accurate compared to source data (load-ready staging layer).
 - <u>Data Usability Testing</u>: Data usability testing is performed to provide quantitative and qualitative measures on migrated data quality that will help guide towards better solutions. This usability testing is usually performed using the CMCS application over the migrated data. A usability test is performed with real data early in the product test cycle to uncover bugs.

- <u>Perform mock migrations</u>: The purpose of mock conversions is to identify and resolve any conversion program issues and configuration problems ahead of time. In addition, the mock migrations provide opportunities for independent data validation of the actual data volumes and assessment of data conversion readiness and ensure that the entire data conversion process can be finished within the timeframe allocated for data conversion cutover. Mock conversions may also focus on validating/evaluating the following:
 - Formatting of data
 - Data completeness
 - Data accuracy
 - Eliminate duplicate records
 - Resolve any unexpected issues

Approach to managing risk associated with data synchronization:

Database synchronization is the process of establishing data consistency between two or more databases. Data synchronization ensures accurate, secure, compliant data and successful team and customer experiences. Based on our experience working on various data migration projects, Celtic will work with the state to manage the following data synchronization risks.

- Security: Security and confidentiality must meet certain regulatory standards as they relate to specific industries and privacy laws. Unique systems have different policies and access requirements. Our data synchronization process will ensure that changes made to migrated data are updated to meet the standards set by state-specific security needs. Celtic will collaborate with the state to prevent Data breaches or leak problems by using industry-standard data masking and encryption techniques.
- Data quality: multiple systems used by multiple business users mean that data is structured differently throughout its lifecycle. Ongoing updates and constant validation must be integrated and synchronized from all sources while maintaining strict integrity of information within a secure environment. Celtic will place a seamless synchronization process.
- Regular synchronization of sources and targets continually improves your data's value but makes it work specifically for your business. In the case of the big bang approach, migration is executed during weekends and started early in the weekend, so after migration, ETL job execution – reconciliation reports and write-back tables can be analyzed. Based on the reconciliation report analysis, which indicates the records have not migrated to the target system, combined with a detailed error description captured in the write-back table, which helps the State's business team to analyze the root cause and fix the data at the source system. Once all the data issue is fixed at the source end for the errored records captured in the write-back table – the ETL Job should be re-executed to perform migration to the target system.
- Management: Celtic will ensure that data organization must be managed and integrated in real-time to ensure accuracy and prevent errors like rejected records or data that is in an

incorrect format. In the case of the Incremental load approach, migration should be executed as night loads soon after business hours to avoid business impacts and perform analysis of reconciliation reports and write back tables. Based on the reconciliation report analysis, which indicates the records not migrated to the target system, combined with detailed error description captured in the write-back table, that helps the Client business team to analyze the root cause and fix the data at the source system. Once all the data issue is fixed at the source end for the errored records captured in the write-back table – the ETL job should be re-executed the following data during the night load to perform migration to the target system.

- Performance: In order to successfully synchronize data, it must pass through five phases:
 - a. Extraction from the source
 - b. Transfer
 - c. Transformation
 - d. Transfer
 - e. Load to target

Celtic will ensure that these steps are not missed or incomplete, as they can impact the result. Perform data validation and reconciliation:

- o Data validation and reconciliation (DVR) is a methodology that uses process information and statistics to ensure data validation and reconciliation by correcting measurements.
- Approach:
 - o <u>Record count check</u> The number of records identified from the source system based on the mapping document should match the target system. For example, the SELECT count (*) from the table will provide us with the number of records at the target, which is a quick and effective way to validate the record count.
 - o <u>Checking for distinct values</u> Check for distinct values available in the target table for any columns. If the specification document says that a column in the target table should have distinct columns, use a SQL query
 - o <u>Missing values</u>: Check for the mandatory field values based on application requirement. If there is no source value, then migration will default the value.
 - o <u>Incorrect values</u>: Check for data transformation based on business rules.
 - o <u>Badly Formatted Values</u>: Data loaded to MMCIS should satisfy specific formats according to the requirement. For example, the date column of the target table should store data in the format 'YYYYMMDD'.
- *Data complexity*: Celtic will ensure that the more data, the more complexity will not become an issue to appropriately interface data in new situations while enabling it to continue to work with the old systems. Further, as technology changes, data that is

updated to a new system must be consistent with its original source and target. Data synchronization stabilizes incoming and outgoing data, ensuring it is updated and compliant across the board.

• Data error resolution process:

This section describes the process used to identify, escalate, and resolve data errors during the data conversion process

- o Analyze the data during the error occurred.
- o Report an issue with the label "CONVERTED_DATA_ISSUE"

Critical data errors prevent a record from being loaded into the target data storage and/or cause data integrity errors. These types of data errors need to be identified and addressed as soon as possible. If possible, these types of data errors need correction in the legacy system prior to subsequent extracts and loads. Critical data errors will likely prevent continuing with other conversion loads dependent on the failed records and must be resolved quickly, or these records should be skipped or removed from subsequent conversions until fixed. Non-critical data errors are those that have invalid values or missing configuration data that will not prevent a record from being loaded. These types of errors need to be identified and addressed for resolution.

The data error resolution process involves:

- o Loading the non-critical erroneous data into the error table and analyzing data to remove the error.
- o Checking error logs for critical erroneous data and the support team does ensure correction of data immediately

A sample Data Conversion and Migration Test Plan, sample Validation Test Plan, and sample Synchronization Test Plan from a similar project

A comprehensive data migration testing plan will be developed along with the support of the MMCIS team. Along with data migration, it also needs to consider referential constraints (setting and populating master tables first) and setting up new data in newly created target tables. Testing will also validate that default values have been assigned to target fields where values are mandatory in the target but not available in the source.

Data Conversion Testing Approach:

Celtic will validate that the source data containing masked data from production is correctly transformed and migrated and made available in the target applications per the proposed solution. Checks such as database SQL queries, data verification through GUI, report analysis, etc., will be done to validate the migration process.

Unstructured Data:

Unstructured data will be migrated from source (unstructured) to target format as part of unstructured data migration by the data migration team, and the testing team will validate the data in the target system for data integrity as given in the mapping sheets.

Validation Test Approach:

Verifying the migrated data with the application will be done in the data migration environment. This will define critical business scenarios related to data migration and validate those scenarios. Celtic team will support the MMCIS team in the preparation and execution of data migration scenarios as a part of UAT support.

Synchronization Testing Approach:

The high level of migration accuracy will also be verified at a system level between the source and MMCIS system with specific application flow and reports.

ii.

Design and Technical Architecture Document

The Contractor shall submit, in a format acceptable to NE DMV, a Design and Technical Architecture Document for the solution and all its components comprised of two primary and distinct sections: Section 1. Design, and Section 2. Technical Architecture.

The Design Section must describe how the solution will be configured and/or designed based on the work completed and decisions made during the Gap Analysis and collaborative review of the requirements in the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2). The Design Section should include detailed workflows, screen shots, and similar tools to describe how the solution will be designed, configured, or otherwise arranged to meet the business processes, and functional and technical requirements of the NE DMV.

The Technical Architecture Section must describe the entire system architecture, including all application layers, all software included, security layers and features, required interfaces with external systems, configuration, and network considerations. The Contractor shall fully document all application changes and/or configurations made to meet the NE DMV's specific requirements. The NE DMV shall have the authority and access to modify, enhance, delete, and replicate all nonproprietary source code. Proprietary components must be identified with supporting documentation such as license restrictions, copyright, patent, or similar intellectual property documentation.

Response:

<<Celtic's approach for planning and conducting the design and development activities>>

Celtic will onboard its staff to the project and conduct a Project Kickoff meeting. I3-Celtic will initiate the work on the key planning deliverables/ artifacts, such as Project Management Plan and the Project Work Plan. The base CMCS product will be deployed in a sandbox environment as part of the initiation and planning activities.

Celtic will conduct a demo of the CMCS Solution during sprint 0 of the project. During this demo, Celtic and the NE DMV business SMEs will identify the product gaps and deviations required to meet the RFP requirements and document them in the Product deviation backlog as user stories. During the execution of each sprint after sprint 0, Celtic will conduct Joint Application Design (JAD Sessions) with the Business users to finalize the functional design for each identified user story from the product deviation backlog. The User experience will be validated with Business stakeholders, and necessary UI changes will be incorporated into the final product.

We will elicit, document, and manage all requirements and the NE DMV business rules to support the project deliverables. Business Rules will be identified as part of the JAD sessions. NE DMV will sign off the commonly generated requirement document(s) for the project deliverable.

In all our implementations, we follow our proven COTS implementation methodology which includes:

- A. Requirements verification to drive out the Requirement Traceability Matrix (RTM),
- B. Detailed COTS gap analysis,
- C. Product Verification Documentation (PVD) to identify the necessary changes to the COTS product, and
- D. Interface Control Document (ICD) to identify all the interfaces with detailed interface specifications and formats.

At Celtic we practice Agile Methodology that is rapid, adaptable, co-operative, quality-driven, and iterative in an overall effort to efficiently implement configuration and customizations to our COTS Products as well as new development as depicted in the following diagram.



Celtic will build a Requirements Traceability Matrix (RTM) that will be used throughout the project to ensure all requirements are included in the solution and to ensure each requirement is fully tested and cross-referenced to a test case. A COTS Product Verification Document (PVD/FRD) will be created to ensure those pieces of functionality in the COTS product that have been addressed by NE DMV Business Area Experts (BAEs), and the Subject Matter Experts (SMEs) is consistent with NE DMV's requirements. Our product Architect will review the PVD and decides the approach or division between customization and configuration.

As pieces of functionality are configured, they will be released to a sandbox environment for user verification. This approach will help validate both the application and the data. As users provide early feedback, action can be taken to amend the configuration and/or data prior to the next sandbox release. With each sandbox release, a version of the converted data will be deployed to the sandbox environment. In this way, the users can see that their feedback is addressed and

reflected in the next sandbox release.

This approach has additional advantages:

- 1. The users gain valuable familiarity with the system and feel a sense of ownership and buy-in to the new way of doing business.
- 1. The application is validated using the converted data.
- 2. The converted data is validated using the application.

We have utilized wireframes, business rules, workflows, interface functional requirements and report specifications to build the current COTS CMCS Solution. Additional wireframes, business rules, workflows, interface functional requirements, and report specifications will be added to CMCS to comply with NE DMV's requirements.

After the RTM is finalized, we will work with the NE DMV's business area experts to go through our COTS solution step-by-step and screen-by-screen, documenting any necessary configuration changes and modifications required to meet the NE DMV's requirements. The result of this activity will be a deliverable called the COTS Product Verification Document (PVD/FRD). The PVD will provide the design criteria needed for the development team to make the necessary configurations and customizations to the solution.

While the PVD analysis and documentation are being performed, we will work with the NE DMV IT experts to identify and document the required interfaces in the Interface Control Document (ICD) to define exactly how we will interface with both internal and external systems. To minimize the need for program changes due to external system changes, the CMCS solution has been developed using a Universal Interface Controller (or UIC) that acts as an intermediary between the external systems and the application programs. When external systems change, the UIC will be changed, eliminating the need to make application program code changes.

During this phase, we will also discuss and review the current legacy data dictionary and data to begin the mapping exercise between the legacy data store and the new database. We will also analyze and discuss how we can create a common customer for the Driver and Vehicle systems, as required, if it does not already exist. This task will assist with the formation of the data conversion plan and will help provide early converted data to the business group for feedback.

Our Functional Requirement document, Interface Control document, and Product Verification document will provide the necessary details for the to-be business process models, wireframes/screens, business rules, workflows, interface functional requirements, report specs, etc.

Celtic's proposed system will function in conformance with NE DMV Business Rules. Celtic will configure business rules provided by NE DMV in the system, and those rules will be validated as part of User acceptance testing. Our rules engine will have the capability to transform legislation and policy regulations into executable and maintainable transactions. This will empower policy owners to assess the impact of new and existing policies while achieving consistency across all delivery channels. Business units will be able to provide detailed decision reporting to understand how decisions are reached and enforce compliance requirements.

<< Technical Description, including functional and non-functional components>>

CMCS is developed on a Service Oriented Architecture (SOA) with a presentation layer, a business logic layer, an interface layer, and a data layer. The layers are independent of each other in that you can easily make changes to the presentation layer without affecting the business logic layer or the data layer. The data layer can be any of many relational database engines, including SQL Server, Oracle, and DB2. We have built our solution in both a Java and .Net structure and have chosen .Net Core for this engagement in keeping with the NE DMV environment. The following features and diagram depict our Service Oriented Architecture:

The CMCS Solution is built on multilayered MVC architecture as follows:

- It is multilayered, consisting of the MVC presentation, process, service, and integration layers. This design makes the structure flexible, scalable, and easily maintainable.
- Our Process Layer separates the process and business rules and provides multiple options to implement, either by native code or by using industry-standard rules and workflow engines.
- Our Service Layer contains all the application-specific business logic that will be used irrespective of the access mode. For example, the same application business edit logic is used by an online web interface, web service interface, or batch interface.
- Our Data Layer encapsulates all the database access-related logic
- All interfaces (synchronous/asynchronous, inbound/outbound) are managed through our Universal Interface Controller (UIC).
- Our Presentation Layer provides the flexibility to customize/configure the presentation as per client needs. It accommodates web browsers as well as mobile applications, e-forms, etc.

Below is a schematic of the CMCS solution architecture, including the system, interfaces, and software:



Each of the solution's key components is explained in the following table:

Component	Purpose	
Core Business	This COTS product will be customized and configured to meet NE DMV	
Modules	business requirements.	
Peripheral Modules	s These modules will be part of our integrated CMCS Solution.	
Universal Interface Controller	InterfaceThis is the integration adapter available as a part of the COTS solutionrThis adapter provides the integration capabilities to enable data exchange between the core business modules and the outside system	
Channels	CMCS is a browser based solution that consists of a modernized	
Channels	responsive interface that adapts to desktop or handheld devices. CMCS shall be accessed from the user's system with internet connectivity and compatible with standard browsers like Chrome, Edge, and Firefox.	
Enterprise	NE DMV Managed systems and services to be interfaced/Connected for	
Components	integrations between multiple systems.	
Batch Process	Daily, Monthly, and Yearly batch processes that are scheduled to run as per business functions requirements.	

Each of the Core Business Modules is explained in the following table:

IRP System	A complete solution for IRP Registration and Credentialing.	
IFTA System	A complete solution for International Fuel Tax Agreement (IFTA) registration, credentialing, tax reporting, and auditing.	

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Permit System	Self-service and agency-issued IRP/IFTA Permitting system.	
CVIEW System	Fully integrated with SAFER, integrated solution with IRP and IFTA.	
Document Management System	Celtic's Document Management system (CTS-Doc) provides functionality for inline scanning/uploading, indexing, collection, and storage, along with queue management for subsequent batch scanning allowing for mass document collection.	
Enterprise Modules	Our COTS solution suite CTS-IRP is modular in design, and common functions like Common Customer, Inventory, and Finance are encapsulated in our Enterprise Module.	
Peripheral Modules	Some of the common technical modules are encapsulated in the peripheral modules (Workflow Engine, Business Rules, Fee Estimator, Reports et al.)	

iii. <u>Interface Plan</u> The Contractor shall provide an Interface Plan which will specify how the interface functionality described in the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2) will be met. This plan must address programming required to create these interfaces and specify a schedule of when interfaces can be tested and deployed. The Contractor must describe State resources needed to assist with interface development.

Response: Celtic has extensive experience interfacing components in multiple jurisdictions; for example, VINTelligence (replacement of VINA), NADA, Address Verification, Financial, State T & R, Driver's license, IRP, IFTA, CVIEW, State GIS data, Payment Service, etc. This means that you can keep all the functionality that has already been modernized in your current systems, and rest assured that Celtic can craft the requisite interfaces and hand-off protocols. We will use web services to the maximum extent possible for this implementation.

Included in the CMCS solution is our proprietary Universal Interface Controller (UIC), which provides quick and easy interfacing with external systems. CMCS supports standard data formats, including XML, JSON, CSV files, Flat files, and Excel spreadsheets to query, import, export, or update data to and from external systems.

Our Interface Control Document (ICD) will define all the external interfaces and communications between CMCS, NE DMV's existing systems, and any third-party systems that are required for the extraction/transformation of mapping rules. Sections of the ICD will be then referenced in the Product Verification Document (PVD/FRD).

Below is a Sample of our Interface Control Document.

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	2.5 VINtelligence					
	The ePART -system v applications.	e <u>ePART</u> -system will use <u>VINtelligence</u> software to perform VIN validation in IRP, IFTA and Permit pplications.				
	The web service det	ails are provi	ded in following document.			
	Type of interface	Web service				
	Prod URL					
	Test URL	https://vinte	lligence3.polk.com/vindecoder/VinDecoderServi	ce?wsdl		
	Contact information for the testing					
	WSDL file	WSDL file				
	The methods used from this web service will be:					
	Function		Use	Comment		
	decodeVin		This function will decode the VIN and provide specified parameter values			
÷						
	Sample Decode VIN Requests - < <u>decodeVin</u> >					
	<soapenv:envelope <br="" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">xmlns:web="http://webservice.vindecoder.polk.com/"> <soapenv:header></soapenv:header></soapenv:envelope>					
	< <u>soapenv:Body</u> >					
	<web:decodevin></web:decodevin>					

The ICD and PVD will be the base document for Celtic to prepare technical design specifications for all loads into or extracts from NE DMV's enterprise systems and perform detail design, code, and unit test all load programs into or extracts from NE DMV's system components.

We will Coordinate and serve as a point of contact with any external partners in terms of ensuring the partner prepares the technical design specification and performs detail design, code, and unit test of all load programs into or extracts from partner agency systems within the timelines in the approved project work plan.

During development, as interfaces are developed, and unit tested, the system will be deployed in the sandbox environment for user experience and SIT environment where test scenarios are applied, and actual results are competed to expected results and assigned a pass/fail status. Failed scenarios are fixed and re-tested. We will work with the NE DMV to remediate any issues found during the user acceptance test phase of the project. We will also provide project management support to Iowa and assist in coordinating system migration activities based on the requirements to ensure a successful system cutover.

The following diagram depicts our universal interface controller process. Changes to external
systems can be accommodated by the UIC that the MMCIS applications do not have to change.



Figure 18 Celtic's Universal Interface Controller Process

iv. Testing Plans

The Contractor shall provide Test Plans, Test Data (when required), and Test Scenarios. The Contractor shall develop comprehensive test plans before beginning each test phase. Each test plan shall include entrance and exit criteria for the test activity. The Contractor's plans shall clearly demonstrate how each function and possible risk in the solution and all its components is evaluated, prioritized, and tested. The Contractor, in cooperation with the NE DMV, shall develop test scenarios and data requirements to be used for testing all required functions. The testing plan shall include how all requirements will be met for the following subsections:

a) Unit and System Test Plan

As part of the development process, the Contractor shall conduct Unit and System Testing on all release components to be delivered. The Contractor shall develop Unit and System Test plans, execute the testing in an appropriate environment, and report in writing all test results. The plan must assume Unit and System Testing has validated the MMCIS system configuration and all planned system interfaces. The Contractor shall, in its Unit Testing Plan, specify release components to test, and how defects will be corrected.

b) User Acceptance Test (UAT) Plan

The Contractor shall develop a UAT Test Plan. The UAT Test Plan shall include:

- **1).** Entrance criteria (criteria which must successfully be met before testing can occur).
- **2).** Exit criteria (criteria which must successfully be met before testing is considered complete).
- 3). How UAT scenarios will be developed and finalized.
- **4).** How testing will occur (classroom set up, number of testers per class, preparatory materials to conduct training, and the role of the Contractor in conducting UAT).
- c) Performance Test Plan

The Contractor shall lead the preparation of a Performance Test Plan, which includes the use of system and network monitoring software, and system load simulation software. The Contractor shall work with the NE DMV to develop the appropriate combinations of transactions and transaction levels to test the system. The Performance Tests shall test, at minimum:

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- 1). Response time
- 2). Resource utilization
- **3).** Overall system performance
- **4).** Scalability of the following components:
 - 1) Application software,
 - 2) Servers,
 - 3) Interfaces,
 - 4) Network, and
 - 5) Database Management System (DBMS/SQL Server).
- d) Vulnerability Test Plan

The Contractor shall prepare a Vulnerability Test Plan to address the security requirements of the system and ensure the system is compliant with state and federal security requirements. The Contractor shall interpret all results, review them with the NE DMV, and schedule a meeting to present recommendations to the NE DMV to address any security issues.

- e) Regression Test Plan The Contractor shall prepare a Regression Test Plan which describes the approach the Contractor will take for regression testing.
- f) Compatibility Test Plan The Contractor shall prepare a Compatibility Test Plan which describes the approach the Contractor will take for compatibility testing. Testing shall ensure software is capable of operating on different hardware, operating systems, applications, network environments, mobile devices, and other devices or platforms users may employ to access the system.

Response: Celtic will apply industry standard quality processes and metrics to deliver a quality solution for NE DMV.

The comprehensive Master Test plan will include different types of testing, test plans, test environments used for different types of testing, test data planning/creation, defect management using incident management tools, risk identification, assessment, impact analysis, and mitigation strategies that will be developed as per industry standards. The same will be shared with NE DMV as part of the testing deliverable.

Different types of testing will be carried out in the agile methodology, with one release to production at the end of implementation. This approach is given in the release plan.

The following diagram depicts the testing team's activities during the Agile testing approach.

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Figure 19 Testing Activities in Agile

Testing Approach

To meet the requirements of the State, Celtic will perform several types of testing and align with the proposed agile methodology as depicted below the sample chart:

	Sprint	Program Increment	Solution Increment	Release
Testing Types	•Code Reviews •Walkthroughs •Unit Testing •Configuration Testing •Data Validation •Regression Testing •Automation	 Smoke Testing Integration Testing Conversion Testing Regression Testing Automation Browser Compatibility Testing Mobility Testing Performance Testing(Load, Stress, Endurance) Accessibility Testing Internationalization and Localization (Multi-lingual) Role Based Testing 	 Integration Testing Conversion Testing Regression Testing Automation Performance Testing(Load, Stress, Endurance) Security (Vulnerability, Penetration) Disaster Recovery Testing User Acceptance Testing 	•Smoke Testing •Regression Testing •Automation •Availability Testing •User Acceptance Testing
Testing Activities	 Sprint Test Planning Test Case preparation (all applicable test types) Test Data preparation Test case execution Automation scripting Code reviews Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite Test Report 	 PI Test Planning Test Case preparation (all applicable test types) Test Data Preparation Test case execution Automation scripting Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite Integration test planning and execution UAT test planning (Test case and test data preparation) Test Report (all applicable test types) 	 Integration Test execution (SIT) Test Data Preparation (all applicable test types) Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite UAT test case execution Test Report (all applicable test types) 	 •UAT test case execution •Defect logging and triaging •UAT Test Report •Test Closure Report

Figure 20 Testing Types by Agile Cadence

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1. Sprint Testing

Sprint level Testing verifies that each module of the proposed solution's functionalities works according to the State's requirements in the non-integrated environment. It involves testing functionalities as part of use stories planned for each sprint. The below testing tasks are performed at the Sprint level:

- Requirement validations
- Test scenarios/case preparation
- Test data preparation
- Test executions
- Defect management
- Defect report,
- Test sign-off for Sprint

2. Integration Testing

Interface testing will ensure that all module dependencies are functioning as expected and that data integrity is maintained between separate modules for the entire system. In this phase, Celtic will test the applications in the integrated environment, and the primary focus is to validate the interfaces between source and destination applications. Business scenarios will be tested in an integrated code during this phase.

Following integration checks will be in scope:

- a. Request, response, and error message validation between core product suites using middleware.
- b. Data flow and data integrity validation between core product suites.
- c. Strategic interface validations.
- d. Interface validation till middleware layer for NE DMV legacy applications and External applications.

Both real-time and batch interfaces will be validated as part of Interface testing.

Approach:

- a. All the functionalities listed under the features to be tested will be tested as part of the process flows, business rules, and field/UI level validations.
- b. Test cases will be logically grouped based on the functional modules, and execution will be carried out sequentially.
- c. Test case execution will be carried out using green field data (new data) or migrated data (legacy data) as per the applicable scenarios.

3. Regression Testing

Regression testing is the process of validating the impact on the existing functionality due to the new changes/defect fixes. Regression testing will ensure the code being released will be fully tested and stable.

Regression testing will be performed as part of each sprint level so that we can validate that the functionality delivered in earlier sprints is working fine. The approach for identifying the regression suite is defined in the approach section.

Approach:

- a. During user story analysis and test case preparation, the key scenarios are marked for regression testing, and these will be added to the master regression suite. The business analyst and business teams will review this regression suite to ensure regression coverage.
- b. The manual regression execution will be done for the test cases which cannot be automated.
- c. Key regression test cases will be automated so that they can be used in further sprints and releases.

4. Cross Browser testing

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product complies with Cross Browser compatibility requirements. The following execution approach will be used for Cross browser testing.

Approach:

- a. Ensure test cases cover all the end-to-end transactions of the application.
- b. Execute the test cases in Google Chrome, Windows Edge, and Firefox browsers assuming Edge is the Primary Browser for testing.
- c. Validate application behavior is consistent across all browsers.
- d. Validate browser-specific defects are fixed in all browsers.

Note: Latest Browsers will be used for Cross-Browser testing as per agreement with NE DMV MMCIS.

5. Data Migration Testing

Data migration is a process that involves the migration of data from source to target. Along with data migration, it also needs to consider referential constraints (setting and populating master tables first) and setting up new data in a newly created table or attributes in the target database.

Testing must also validate that default values have been assigned to target fields where values are mandatory in the target but not available in the source.

Features to be tested:

Structured data and unstructured data will be validated as part of data migration testing.

Note:

a. A complete list of structured and unstructured data to be migrated in the core systems will be captured in the data migration strategy document prepared by the data migration team.

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b. Sample validation of bulk uploads will be tested as part of data migration testing, the solution is not yet finalized, and the testing team will refer to the data migration strategy document prepared by the data migration team.

Approach:

- Structured data: Validate if the data from the source containing masked data from production is correctly transformed & migrated and is made available in the target applications according to the new solution.
- Checks such as database SQL queries, data verification through GUI (Celtic application), report analysis, etc., will be performed to validate the migration process.
- Unstructured Data: Unstructured data will be migrated from the source (unstructured) to the target (structured) format as part of the unstructured data migration by the data migration team. The testing team will validate the data in the target system for data integrity, as provided in the mapping sheets.

6. Security Testing

The proposed CMCS solution is deployed in multiple jurisdictions, and the product is compliant with IT industry security standards. However, we will be testing the customized product to verify that the CMCS solution meets the security standards according to NE DMV requirements. Security testing will be planned before go-live during the pilot testing phase.

The main objective of security testing is to ensure that the NE DMV MMCIS Solution is free from key OWASP Security Vulnerabilities.

Key Differentiators:

- The solution will be compliant with the OWASP (Open Web Security Project) and SANS 25 guidelines in our security testing services, along with PCI-DSS Standards as per the application-specific requirements.
- Static and Dynamic security analysis.
- Security testing SMEs compliance assessment with security standards.
- Experience in handling various security testing projects with complex business logic.

7. Performance Testing

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product is already compliant with industry-standard performance parameters. However, we will be performing performance testing of the customized product to verify that the CMCS solution meets the performance standards according to NE DMV requirements. Performance testing will be planned before go-live during the pilot testing phase.

Performance testing will be done for in-scope applications and modules based on the feasibility analysis. It includes load, stress, endurance, and volume testing. Performance scripts will be developed in a dedicated integrated or pre-production environment, and the same will be used for execution in the respective environment. A production copy of the data will be loaded into the database prior to performance testing in the pre-production environment. Business critical transactions, as well as high-volume transactions, will be identified for performance testing based on the criteria below.

- Peak hour user load
- Average hour user load
- Peak-hour transaction volumes
- Average hour transaction volumes
- Future volume forecast
- User concurrency
- Segregation of web and mobile load

Types of Performance Testing considered in scope:

- Load Test: To validate the performance when applied to peak load.
- Stress Test: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks.
- Endurance Test: To validate performance when applied to peak load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc.

We assume that the Production copy of data will be loaded into the database prior to performance testing in the pre-production environment by the NE DMV team. Performance testing will be carried out to emulate a production-like scenario where OLTP and batch execution will be executed. Also, the load will be distributed in accordance with the Non-Functional Requirements (NFR) that were provided to simulate the number of transactions and the user load. Based on non-functional requirements, a workload will be designed.

8. User Acceptance Testing

Celtic will provide support to NE DMV acceptance testers in setting up UAT test data, management of testing tools, defect tracking, and defect documentation. Training manuals will be leveraged for training users on the core system and training them on relevant testing tools.

UAT will have the following phases at the following high level:

- UAT strategy finalization for risk identification, prioritization, and creating a risk-based testing approach.
- UAT test planning and defining acceptance criteria.
- Helping to create business scenarios/ use cases/ scripts across all the areas of testing in scope.
- UAT environment set up.
- Set up test data for UAT and confirm that migrated data is available prior to testing.
- Test execution and defect reporting.
- Report the progress of test execution.
- Summarize test results and obtain signoff by NE DMV acceptance manager.

Testing Status Reporting:

As part of the project execution, a testing status report will be prepared for each planned test cycle that will provide a comprehensive report on the testing cycle for the application. This document consists of the following sections:

- a. Testing overview.
- b. Test results summary (Including defect summary).
- c. Analysis, conclusion, and recommendation on test cycle status.
- d. Azure DevOps (ADO) shall be used to track the progress of the project from various viewpoints. It can be used to check the percentage of completion for test cases against the planned test cases and the pass/fail status of the test cases. It can also generate reports related to the number of open defects and other such reports.
- e. Weekly status reports: The status will be communicated weekly and will contain the completion status of planned activities for the week and future task planning.
- f. The defect report will be shared along with the test execution status during the execution phase.
- g. Defect status calls will be scheduled as part of the defect management process
 - v. <u>Release Plan</u>

The Contractor shall provide a written Release Plan for a big-bang deployment of the MMCIS which describes the overall approach for this project, its release components, and for future deployment of staggered registration functionality.

The Release Plan shall be comprised of an approach delivering the desired functionality in a reasonable, appropriate, timely, and cost-effective manner. In addition to the overall approach, the Release Plan shall include at a minimum: processes, inputs and outputs, Deliverables, and necessary resources. The Release Plan shall be approved by the NE DMV prior to its implementation.

The Release Plan shall describe how the system will be divided into two releases (Release 1: MMCIS and all components; and Release 2: advanced services for staggered IRP registration functionality).

The Release Plan shall include at a minimum:

- a) A description of each release component,
- b) Functionality of each release component,
- c) Relationship between and dependencies on other release components,
- d) Approach to data conversion,
- e) Approach to data synchronization, and
- f) Approach to roll back in case of a release component failure.

Release components may be developed at the same time. Given the size and complexity of the project, the NE DMV anticipates functionality deployed in the first release may be impacted by functionality developed in the second release. The Release Plan shall provide a resolution to address this risk. The Release Plan shall be updated and maintained over the course of the project.

Response: Celtic proposes a robust release approach for NE DMV. The guiding principles for our release approach are as follows:

- Plan releases in line with requirements resulting from approved changes
- Build effective release packages for the deployment of one or more changes in production

- Test release mechanisms to ensure minimum disruptions to the production environment
- Review preparation for the release to ensure successful deployment
- Deploy the release in line with structured implementation guidelines Celtic proposes the production rollout approach shown below:

Rollout and Deployment Process	High-Level activities
Rollout Planning	 Identify the scope and content of an approved change Perform risk assessments for the release and gain signoffs from designated groups/representatives Prioritize, plan, and schedule release activities Determine the resources and strategy for the release Document and track all release planning activities
Rollout Building	 Select a suitable release mechanism Build the release package in development and test environments Test the release package, and deliver the change in complete congruence with the requirements Ensure that the release package is updated to the configuration management database
Testing	 Design and build an accurate test environment that mimics production Perform key functionality acceptance tests aligned to the requirements of the change and the release Perform controlled testing Evaluate acceptance testing results and signoff to make a confident move toward release preparation

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Rollout Preparation	Ensure the availability of adequate resources		
	Prepare an Implementation Plan		
	• Review the preparation and suitability of release for deployment into the production environment		
	• Ensure the change management process has handled all related changes		
	• Deployment Readiness Assessment Report to be reviewed with all key stakeholders		
	Make Go/No Go Decisions for Production deployment		
Rollout Deployment	Ensure users are trained for any new features		
	Database activities		
	Database activitiesDeploy the release into the production environment		
	 Database activities Deploy the release into the production environment Open Production Environment for Smoke Testing 		
	 Database activities Deploy the release into the production environment Open Production Environment for Smoke Testing Evoke emergency Fix Procedure in case of issues (Rollback to previous production state if required) 		
	 Database activities Deploy the release into the production environment Open Production Environment for Smoke Testing Evoke emergency Fix Procedure in case of issues (Rollback to previous production state if required) Review the deployed release 		
	 Database activities Deploy the release into the production environment Open Production Environment for Smoke Testing Evoke emergency Fix Procedure in case of issues (Rollback to previous production state if required) Review the deployed release Send Communication to all key stakeholders on the completion of the deployment 		

vi. <u>Training Plan</u> The Contractor shall develop and document recommended training efforts to carry through the end of the Warranty period and shall include at a minimum:

- a) Identification of Contractor trainer(s), their training roles, and system and training experience.
- **b)** Identification of training locations, equipment to be used, and how it complies with NE DMV training requirements as found in Segment 2: Perform Implementation, Conduct Training.
- c) Types of training recommended (e.g., Instructor-led, Computer Based Training, webinar) for each user type/role, and the recommended number of sessions and length of each training proposed for each type of user.
- d) Recommended hours of training for each user type.
- e) Proposed training syllabus/curriculum outlines.

- f) Provide recommended training materials (presentations, handouts).
- **g)** Recommended approach to how an external customer training program would be provided.
- h) Recommended number of classes, number of web-based training modules, and number of sessions necessary to sufficiently train MMCIS users.
- i) Recommended training class sizes.
- j) A detailed training schedule containing the delivery schedule for all training.

Response: Celtic will work with NE DMV to create a comprehensive training plan that will include:

<u>Approach</u> : This section will include the overall approach (user group selection, training sessions, content type, delivery mechanism, user group sizes etc.)

<u>Outcomes</u> : This section will define the success criteria in terms what the users should be perform with the system

<u>Pre-requisites</u> : This section will capture all the activities that Celtic and NE DMV will have to complete before the start of the formal training process (e.g. training material, environment setup, scheduling training facilities, blocking users time etc.)

<u>Curriculum</u> : This section will outline the duration and agenda of recommended training for each user group including external users, Training group sizes and the overall training schedule

vii.

Knowledge Transfer and Turnover Plan

The Contractor shall prepare a plan which describes how knowledge will be transferred to technical and support staff throughout the project including turnover of MMCIS support to the NE DMV.

The Contractor shall specify any required knowledge or skill prerequisites prior to knowledge transfer activities with a schedule of when the prerequisite(s) must be met.

The Knowledge Transfer and Turnover Plan shall support active participation and involvement of the State of Nebraska's resources from project initiation through system turnover.

The Training and the Knowledge Transfer and Turnover Plans shall be coordinated to ensure appropriate training is provided, and State of Nebraska staff have the knowledge and tools necessary to support the system.

Response: Celtic will conduct a knowledge transfer of the CMCS solution to the NE DMV resources after the Go-live to assist them in becoming self-sufficient during the production support phase. Knowledge Transfer is a detailed process of planning, scheduling, imparting, and monitoring of transfer of knowledge and skills from Celtic to the NE DMV team. The goal of knowledge transfer is to provide the NE DMV team with the knowledge and skills of the new system to ensure the NE DMV team can assume service delivery responsibilities for the new CMCS solution. Knowledge transfer is not end-user training or communication activities. Identified resources must have a baseline set of skills prior to knowledge transfer activities, as knowledge transfer does not include

training on specific tools (SQL Management Studio, Visual Studio, etc.), performing data corrections, programming, hardware issues, or network issues.

Celtic will follow a structured approach to transitioning the knowledge of application services to the NE DMV team for the maintenance & operations Phase of the Project. The transition process can be typically depicted into phases mentioned in the below figure:



Figure 21 Celtic's Knowledge transfer and transition process

Transition Planning:

A detailed joint transition planning phase precedes the knowledge transfer Execution phase to baseline the approach, which focuses on developing the detailed topics, activities, schedule, and agreement on documentation requirements and acceptance plan, which will be signed-off on by NE DMV. Based on the schedule of activities, the SME availabilities are determined, and the invitations for the KT sessions and on-the-job, hands-on activities are sent out to all the stakeholders.

Classroom Training:

Celtic will provide training to enable the NE DMV team to gain a clear understanding of the daily activities performed by the different team members and provide the necessary support to the NE DMV team to take ownership of the activity.

- Celtic will initially provide pointers to various system knowledge artifacts, documentation, and reference materials such as source code, best practices, and standards to the NE DMV team to be able to take over the responsibility of the modernization maintenance activities.
- Celtic will also provide walkthrough sessions and demonstrations to NE DMV to gain an understanding of the changes made to existing systems as part of the release.

• Celtic will organize transition sessions into various groups and modules to deliver related topics based on skills and training needs.

To transfer pertinent knowledge to the required target team members, NE DMV will identify and provide the list of members assuming different roles and responsibilities.

- NE DMV team members will gain mastery of the activities along with the existing Celtic team members.
- The NE DMV team will have existing system documentation and various functional/technical design documentation, and operation manuals to accelerate the process of learning the fine details necessary to perform the required activities and enhance the current system.
- Achieving sufficient current system knowledge and process details, the NE DMV team will start performing activities in parallel to Celtic.
- However, Celtic team members will still provide the primary support and consultation needed to perform business-critical processes for all warranty activities and resolve any issues until the end of warranty support.

Celtic will structure the training workshops for different stakeholder groups to cater to the different NE DMV teams' different knowledge requirements, such as the Functional, Technical, and QA teams.

On-the-Job Training (OJT):

During the On-the-Job Transition phase, the NE DMV Team will gain knowledge and model the activities performed for each specific module and then begin to participate in activities performed by Celtic.

- NE DMV and Celtic will work in parallel, with Celtic providing the support required to
 assume responsibility for assigned activities. Examples of these activities include the
 involvement of the NE DMV team in resolving warranty support tasks, analysis/fixing of
 low-priority warranty defects, deployment of software builds, and Testing activities.
- Celtic team members will still own the primary responsibility for all warranty activities, including daily tasks, resolution of defects/issues, and making decisions in this phase.

- However, the items assigned to NE DMV involving OJTs are excluded from Celtic's SLAs. •
- At the end of this phase, the NE DMV team will be able to perform all required daily • tasks with the help of Celtic.

OJT will be delivered through the following methods:

- Job Shadowing •
- Mentoring/Coaching •
- **Deliverables review process** •

Acceptance:

Knowledge Transfer is considered completed upon:

- Completion of all the items identified in the KT Schedule.
- Sign-off by NE DMV Manager & Celtic Manager for completion of knowledge transfer •

sessions.

SEGMENT 2: PERFORM IMPLEMENTATION 2.

The Contractor is responsible for meeting all requirements of the Contract and approved plans. The Contractor will provide the necessary software licenses not provided by NE DMV, software architecture, system interfaces, and the professional services necessary to implement a solution which supports required business processes, workflow, outcomes, and fulfilling the requirements of this RFP. The Contractor shall incorporate input from the Core MMCIS Project Team regarding screen design and workflow; provide frequent demonstrations to the Core MMCIS Project Team and Executive Support Team if necessary; provide training to the system users; and lead and conduct all solution testing to ensure full and complete implementation and functionality of the MMCIS.

The Contractor is to meet the Scope of Work, Segment 2: Perform Implementation, per steps described below:

Conduct Gap Analysis and Develop Gap Analysis Report a.

The Contractor shall conduct a Gap Analysis which identifies the disparities between the Contractor's solution and the functional and technical requirements contained in this RFP, specifically the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2).

The Gap Analysis shall be used to facilitate project planning and identify all business and technical requirements. The Contractor shall recommend how this effort can be tailored to best align with its solution.

The Contractor shall present a recommended approach for documenting observations and differences. The approach shall be approved by the NE DMV. The approach for the Gap Analysis shall include, but not be limited to:

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- i. Identification of NE DMV, other State of Nebraska staff or partnering staff, and Contractor staff members required to participate.
- ii. Description of how information gathering sessions will be conducted.
- iii. Organization of the analysis.
- iv. Description of how the degree of required change will be quantified or categorized.
- v. Description of how results and conclusions will be presented to the NE DMV.

Reporting: The Contractor shall provide a Gap Analysis Report which identifies the disparities between the Contractor's solution and the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2), contained in this RFP. The Gap Analysis Report shall be presented to the NE DMV and updated throughout the project as continued analysis occurs. Revisions to the Gap Analysis Report shall be provided to the NE DMV.

The Gap Analysis and Report at a minimum shall address all functionality areas, system architecture, data architecture, and system security planning necessary for full implementation.

Response: Celtic has read the RFP thoroughly and understands the NE DMV's requirements. Celtic has performed a "fit Gap" analysis between your requirements and our IRP, IFTA, Audit, Permit, CVIEW, and DMV COTS Motor Carrier Solution (CMCS), and we are confident that our solution provides NE DMV with a 75-80% fit with the remaining 20-25% fit being achieved through configuration and customization for Florida specific requirements.

We will elicit, document, and manage all requirements and the NE DMV business rules to support the project deliverables. Business Rules will be identified as part of the JAD sessions. The commonly generated requirement document(s) will be signed off by NE DMV for the project deliverable.

In all our implementations, we follow our proven COTS implementation methodology which includes:

- E. Requirements verification to drive out the Requirement Traceability Matrix (RTM),
- F. Detailed COTS gap analysis,
- G. Product Verification Documentation (PVD) to identify the necessary changes to the COTS product, and
- H. Interface Control Document (ICD) to identify all the interfaces with detailed interface specifications and formats.

At Celtic we practice Agile Methodology that is rapid, adaptable, co-operative, quality-driven, and iterative in an overall effort to efficiently implement configuration and customizations to our COTS Products as well as new development as depicted in the following diagram.



Celtic will build a Requirements Traceability Matrix (RTM) that will be used throughout the project

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to ensure all requirements are included in the solution and to ensure each requirement is fully tested and cross-referenced to a test case. A COTS Product Verification Document (PVD) will be created to ensure those pieces of functionality in the COTS product that have been addressed by NE DMV Business Area Experts (BAEs), and the Subject Matter Experts (SMEs) is consistent with NE DMV's requirements. Our Product Architect will review the PVD and decides the approach or division between customization and configuration.

As pieces of functionality are configured, they will be released to a sandbox environment for user verification. This approach will help validate both the application and the data. As users provide early feedback, action can be taken to amend the configuration and/or data prior to the next sandbox release. With each sandbox release, a version of the converted data will be deployed to the sandbox environment. In this way, the users can see that their feedback is addressed and reflected in the next sandbox release.

This approach has additional advantages:

- 3. The users gain valuable familiarity with the system and feel a sense of ownership and buy-in to the new way of doing business.
- 4. The application is validated using the converted data.
- 5. The converted data is validated using the application.

We have utilized wireframes, business rules, workflows, interface functional requirements and report specifications to build the current COTS CMCS Solution. Additional wireframes, business rules, workflows, interface functional requirements, and report specifications will be added to CMCS to comply with NE DMV requirements.

After the RTM is finalized, we will work with the NE DMV's business area experts to go through our COTS solution step-by-step and screen-by-screen, documenting any necessary configuration changes and modifications required to meet the NE DMV's requirements. The result of this activity will be a deliverable called the COTS Product Verification Document (PVD). The PVD will provide the design criteria needed for the development team to make the necessary configurations and customizations to the solution.

While the PVD analysis and documentation are being performed, we will work with the NE DMV IT experts to identify and document the required interfaces in the Interface Control Document (ICD) to define exactly how we will interface with both internal and external systems. To minimize the need for program changes due to external system changes, the CMCS solution has been developed using a Universal Interface Controller (or UIC) that acts as an intermediary between the external systems and the application programs. When external systems change, the UIC will be

changed, eliminating the need to make application program code changes.

During this phase, we will also discuss and review the current legacy data dictionary and data to begin the mapping exercise between the legacy data store and the new database. We will also analyze and discuss how we can create a common customer for the IRP and IFTA Systems, as required, if it does not already exist. This task will assist with the formation of the data conversion plan and will help provide early converted data to the business group for feedback.

Our Functional Requirement document, Interface Control document, and Product Verification document will provide the necessary details for the to-be business process models, wireframes/screens, business rules, workflows, interface functional requirements, report specs, etc.

Celtic's proposed system will function in conformance with NE DMV Business Rules. Celtic will configure business rules provided by NE DMV in the system, and those rules will be validated as part of User acceptance testing. Our rules engine, combined with database tables, will have the capability to transform legislation and policy regulations into executable and maintainable transactions. This will empower policy owners to assess the impact of new and existing policies while achieving consistency across all delivery channels. Business units will be able to provide detailed decision reporting to understand how decisions are reached and enforce compliance requirements.

b. Conduct Data Cleansing, Conversion and Migration, and Develop Migration and Conversion Report

Contractor shall be responsible for executing the scope of work contained in the Data Plan.

The Contractor shall provide a report at the end of the completed data conversion and migration processes providing at a minimum:

- i. Number of records converted
- ii. Problems encountered, by record number
- iii. All records not successfully converted, by record number
- iv. The results of a conversion audit
- v. Non-conforming records

Response: Our solution will use the Actian Pervasive tool to extract, transform, and load data into the target database.

The proposed data migration solution caters to the following requirements:

- I. Extracting IRP and IFTA data from source systems
- J. Perform profiling, cleansing, and validation of the extracted source system data by Celtic proprietary tools.
- K. Perform needed transformations and load to target NE DMV solution

L. A configurable metadata driven ETL Framework is built, and error logging and data reconciliation is performed.

The solution can be divided into three logical layers:

- 6. **The Sourcing Layer**: The sourcing layer consists of Legacy Data Stores, which have the master data for IRP & IFTA. The data cleansing activity can be done here.
- 7. **The Migration Layer**: This layer contains all components used for migration. The data is extracted from the sourcing layer and loaded to Source Staging Area. This data is then transformed and loaded to an intermediate Target Staging Area. The intermediate Target Staging/storing area is used for storing transformed data which is aligned with the Target data model and can be loaded directly to Target. The validation, reconciliation, and auditing of transformed data can be performed in this intermediate Target Staging Area. The tools used by Celtic in this layer would be Actian Pervasive and an RDBMS (Microsoft SQL Server) Solution for the Source Staging Area and the intermediate Target Staging Area.
- 8. **The Target Layer:** The target layer would be the Celtic CMCS Solution. The transformed data will be shared as extract files in specified locations which can then be loaded to the OLTP data store of the proposed CMCS Solution.

Below is a typical sequence of steps that make up our data plan and would be part of the NE DMV data conversion:

- Identify the required data sets to be converted during requirements gathering
- Obtain initial conversion files
- Table/Column level two-way mapping (Legacy \rightarrow CMCS and CMCS \rightarrow Legacy)
- Create conversion SQL for code tables
- Create delete SQL to clear data out of the database
- Conversion map creation
- First conversion
- Prepare data clean-up reports
- Weekly clean-up reports review meeting with NE DMV
- Second conversion
- Prepare data clean-up reports

- Perform data cleansing activities
- System test
- Define test scripts and acceptance criteria
- System test PASS
- Team Celtic readiness reviews
- Integrated system demonstration
- Review/update final (Cut-over) data conversion plans and schedule
- Review/update final transition/cut-over plans and schedule
- Review/update final education and training plans and schedule
- Review/update final testing plans and schedule

Celtic will migrate all the identified tables to the new Celtic data structures. We will create a twoway mapping plan to ensure no data fields are missed in the old format and ensure all the fields in the new data structure will contain valid values.

The migration activity will consist of multiple steps depending on the current data conditions. Celtic will create various reports at each step of the conversion to ensure the following:

- Counts in and out are consistent
- Data fields contain expected values
- Records that are not converted have an explanation, so they can be fixed and/or deleted

The Celtic conversion approach eliminates any conversion exceptions before the final run by having multiple conversions using copies of production data and fixing exceptions as they occur. Our conversion programs will identify invalid field values, such as invalid codes and invalid phone numbers, USDOT numbers, VIN's, etc.

The following diagram depicts our data migration process:



Figure 22 360° Data Migration process

c. Update Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2)

Based on the results of the Gap Analysis, the Contractor shall update the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2), to demonstrate how the functional and technical requirements agreed to in the Contract resulting from this RFP will be met by the Bidder's solution. Each functional and technical requirement will be updated with a preliminary statement of how it will be met. The Requirements Traceability Matrix will be updated throughout the project by the Contractor as required functionality is tested or demonstrated. The Requirements Traceability Matrix will be considered complete when all testable and demonstrable requirements have been satisfied. The Contractor is responsible for completing the entirety of the Requirements Traceability Matrix.

Response: Celtic will build a Requirements Traceability Matrix (RTM) that will be used throughout the project to ensure all requirements are included in the solution and to ensure each requirement is cross-referenced to a product verification document (PVD), interface control document (ICD) and test case.

b. Build the Solution

The Contractor shall be responsible for designing, configuring, customizing, and otherwise developing the solution in accordance with the requirements set forth in the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2). Development shall adhere to the details of the Release Plan. The Contractor shall deliver a test-ready solution consistent with the Release Plan.

If design or construction of the solution results in a change to the documentation in the Design and Technical Architecture Document, the Design and Technical Architecture Document must be updated to reflect it.

The Contractor shall gain approval from the NE DMV prior to deployment of each release component.

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Response: A COTS Product Verification Document (PVD) will be created to ensure those pieces of functionality in the COTS product that have been addressed by NE DMV Business Area Experts (BAEs), and the Subject Matter Experts (SMEs) is consistent with NE DMV's requirements. Our Product Architect will review the PVD and decides the approach or division between customization and configuration.

As pieces of functionality are configured, they will be released to a sandbox environment for user verification. This approach will help validate both the application and the data. As users provide early feedback, action can be taken to amend the configuration and/or data prior to the next sandbox release. With each sandbox release, a version of the converted data will be deployed to the sandbox environment. In this way, the users can see that their feedback is addressed and reflected in the next sandbox release.

This approach has additional advantages:

- 9. The users gain valuable familiarity with the system and feel a sense of ownership and buy-in to the new way of doing business.
- 10. The application is validated using the converted data.
- 11. The converted data is validated using the application.

c. Build Interfaces

The Contractor shall be responsible for the design and development of interfaces and data exchanges and fnctionality as identified in the Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2), and Appendix E, the Current System Overview.

Response: We have utilized wireframes, business rules, workflows, interface functional requirements and report specifications to build the current COTS CMCS Solution. Additional wireframes, business rules, workflows, interface functional requirements and report specifications will be added to CMCS to comply with NE DMV requirements.

d. Build System Integrated Help Function

The Contractor shall create, populate, and maintain an integrated help system to assist users during a transaction. At minimum, the Integrated Help shall allow for context-sensitive help to link directly to an electronic version of the System User Guide and NE DMV Policy Manual opening directly to the steps to complete the function without additional searching. Additional help features such as mouse-over descriptions, pop-ups, guided tutorials, live chat, remote assistance or other user assistance unique to the Contractor's solution is acceptable. The Contractor shall create the system integrated help function in a format where the text content is easily editable; minimizing or eliminating the need to make code changes to update the function.

Response: Celtic provides a fully integrated on-line use guide for all functions of the system. An on-line context-sensitive help functionality is also available on data entry screens. The Frequently Asked Question (FAQ) feature is provided to the users and provides detailed answers and screenshots to help the users through specific scenarios. As and when any changes are made to the system, user manuals and FAQs are updated for the related sections.

Build Book – This document will provide details of tools, technologies, versions, and stepwise installation instructions of CMCS Solution.

e. Conduct Testing as per Testing Plan and all subsections

The Contractor shall perform all testing and associated tasks identified in the Testing Plans, including Unit Testing (conducted for each release component), System Testing, User Acceptance Testing, Performance Testing (Volume and Stress), Integration Testing, Vulnerability Testing, Data Conversion Testing, Regression Testing, System Compatibility Testing and Compatibility Testing for the solution and all its components. The Contractor shall obtain approval from the NE DMV before test plans are executed; the NE DMV reserves the right to expand the test plan with additional test cases or requirements. The Contractor is responsible for conducting the following at a minimum:

i. <u>Complete Unit Testing</u>

Unit testing shall be completed by the Contractor as the solution is configured. Unit testing must validate the configuration activities for each release component to successfully meet the NE DMV's requirements before User Acceptance Testing (UAT) begins. Upon completion of Unit testing, the Contractor shall conduct release component walkthrough sessions demonstrating to the NE DMV how the functions of the new system will be accomplished (e.g., live demos of code and specific functionality). Unit testing results shall be kept in an Issue log shared by the Contractor and the NE DMV.

ii. <u>Complete System Testing</u>

The System Test shall demonstrate the successful operation of the solution and all release components which are tested separately in unit testing work together in a fully functional and integrated manner. The Contractor shall ensure the new solution is fully usable, functioning, processing data correctly, and working as required. System Testing shall include testing with all interface partners (Appendix A for Option 1, Appendix C for Option 2) including the ECM if bidder is bidding on Option 2.

System Testing, at a minimum, shall verify the following:

- a) All functions and capabilities of the MMCIS perform as required,
- **b)** Installation of software,
- c) Conversion of data,
- d) System, data, and application security,
- e) Backup and recovery operations,
- f) Accuracy and system performance,
- g) Accuracy of documentation, manuals, and training materials, and
- h) Response time for overall system performance.

By the end of the System Test phase, the Contractor shall demonstrate all known defects have been fixed consistent with the agreed upon approach.

iii. <u>Complete User Acceptance Testing (UAT)</u>

Before beginning UAT, all release components submitted by the Contractor shall meet agreed upon testing specifications, including efficiency and scalability parameters. A separate UAT is required for each release component.

The Contractor shall provide support to the NE DMV for UAT. This includes the preparation of the testing environment; preparation of test data; management and support of testing tools and defect tracking systems; and support tracking and documentation of any defects or issues.

The Contractor shall train NE DMV staff who participate in the testing effort on how to use the test tools.

The NE DMV has the final discretion to determine acceptance of UAT.

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UAT shall verify, at a minimum, the following:

- a) All functions and capabilities perform as required,
- b) Successful simulation of a business day for all users and all functions,
- c) Installation of software,
- d) Integration with all external systems,
- e) Conversion and migration of data and content,
- f) System, data, and application security,
- g) Accuracy of documentation, manuals, and training materials, and
- h) Accuracy, response time, and overall system performance.

By the end of UAT, the Contractor shall demonstrate all defects and issues have been fixed and accepted by the NE DMV.

iv. <u>Complete Performance Testing</u>

Performance Tests shall demonstrate the solution meets performance requirements under anticipated user loads. The test will use peak volumes and test for higher than anticipated volumes and increasing activity levels.

The Contractor shall lead the execution of a Performance Test Plan, which includes the use of system and network monitoring software, and system load simulation software. The Contractor shall work with the NE DMV to develop the appropriate combinations of transactions and transaction levels to test the MMCIS.

The Performance Tests shall test, at minimum:

- a) Response time,
- b) Resource utilization,
- c) Overall System performance,
- d) Scalability, and
- e) Application software for
 - 1). Servers,
 - 2). Interfaces.
 - 3). Network environment, and
 - 4). Database Management System (DBMS/SQL server).

By the end of the Performance Test phase, the Contractor shall demonstrate all defects or performance issues have been fixed consistent with the agreed-upon approach.

v. <u>Complete Vulnerability Testing</u>

The Contractor shall run all tests with guidance from and in coordination with the NE DMV. The Contractor shall interpret all results and review them with the NE DMV and schedule a meeting to present recommendations to address any security issues. Additional scans may be required as determined by the NE DMV.

vi. <u>Complete Data Conversion</u>

Testing Prior to data conversion the Contractor must test the data conversion programs to demonstrate the solution is fully usable, functioning, processing data correctly, and working as required. By the end of the Data Conversion test phase, the Contractor shall demonstrate all known defects have been fixed consistent with the agreed upon approach.

vii. <u>Complete Regression Testing</u>

The compatibility and continued reliability of existing release components shall be regression tested prior to deployment of subsequent release components. As the Contractor tests software and finds defects, regression testing shall verify the modified code to address any given defect has not unknowingly introduced new defects.

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viii. Complete Legacy System Compatibility Testing As appropriate, the scope of testing shall include all functionality and capabilities of the solution. Testing shall also include testing of compatibility of the MMCIS with legacy systems in any way in which they may need to coexist.

ix. <u>Complete Solution Compatibility Testing</u> As appropriate, the scope of testing shall include all functionality and capabilities of the new MMCIS. Testing shall ensure software is capable of operating on different hardware, operating systems, applications, network environments, or mobile devices.

Response: To meet the requirements of the State, Celtic will perform several types of testing and align with the proposed hybrid agile methodology as depicted below sample chart:

	Sprint	Program Increment	Solution Increment	Release
Testing Types	•Code Reviews •Walkthroughs •Unit Testing •Configuration Testing •Data Validation •Regression Testing •Automation	 Smoke Testing Integration Testing Conversion Testing Regression Testing Automation Browser Compatibility Testing Mobility Testing Performance Testing(Load, Stress, Endurance) Accessibility Testing Internationalization and Localization (Multi-lingual) Role Based Testing 	 Integration Testing Conversion Testing Regression Testing Automation Performance Testing(Load, Stress, Endurance) Security (Vulnerability, Penetration) Disaster Recovery Testing User Acceptance Testing 	•Smoke Testing •Regression Testing •Automation •Availability Testing •User Acceptance Testing
Testing Activities	 Sprint Test Planning Test Case preparation (all applicable test types) Test Data preparation Test Case execution Automation scripting Code reviews Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite Test Report 	 PI Test Planning Test Case preparation (all applicable test types) Test Data Preparation Test case execution Automation scripting Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite Integration test planning and execution UAT test planning (Test case and test data preparation) Test Report (all applicable test types) 	 Integration Test execution (SIT) Test Data Preparation (all applicable test types) Defect logging and triaging Daily Test Execution Status Report (DSR) Building Regression Suite UAT test case execution Test Report (all applicable test types) 	•UAT test case execution •Defect logging and triaging •UAT Test Report •Test Closure Report

1. Sprint Testing

Sprint level Testing verifies that each module of the proposed solution's functionalities works according to the State's requirements in the non-integrated environment. It involves testing functionalities as part of use stories planned for each sprint. The below testing tasks are performed at the Sprint level:

- Requirement validations
- Test scenarios/case preparation
- Test data preparation
- Test executions
- Defect management
- Defect report,
- Test sign-off for Sprint
- **2. Integration Testing**

Interface testing will ensure that all module dependencies are functioning as expected and that data integrity is maintained between separate modules for the entire system. In this phase, Celtic will test the applications in the integrated environment, and the primary focus is to validate the interfaces between source and destination applications. Business scenarios will be tested in an integrated code during this phase.

Following integration checks will be in scope:

- e. Request, response, and error message validation between core product suites using middleware.
- f. Data flow and data integrity validation between core product suites.
- g. Strategic interface validations.
- h. Interface validation till middleware layer for NE DMV legacy applications and External applications.

Both real-time and batch interfaces will be validated as part of Interface testing.

Approach:

- d. All the functionalities listed under the features to be tested will be tested as part of the process flows business rules, and field/UI level validations.
- e. Test cases will be logically grouped based on the functional modules, and execution will be carried out sequentially.
- f. Test case execution will be carried out using green field data (new data) or migrated data (legacy data) as per the applicable scenarios.

3. Regression Testing

Regression testing is the process of validating the impact on the existing functionality due to the new changes/defect fixes. Regression testing will ensure the code being released will be fully tested and stable.

Regression testing will be performed as part of each sprint level so that we can validate that the functionality delivered in earlier sprints is working fine. The approach for identifying the regression suite is defined in the approach section.

Approach:

- d. During user story analysis and test case preparation, the key scenarios are marked for regression testing, and these will be added to the master regression suite. This regression suite will be reviewed by the business analyst team and the business team to ensure regression coverage.
- e. The manual regression execution will be done for the test cases which cannot be automated.
- f. Key regression test cases will be automated so that it can be used in further sprints and releases.

4. Cross Browser testing

The proposed CMCS solution is already deployed in multiple jurisdictions. The product is compliant with Cross Browser compatibility requirements. The following execution approach will be used for Cross browser testing.

Approach:

- a. Ensure test cases cover all the end-to-end transactions of the application.
- b. Execute the test cases in Google Chrome, Windows Edge, and Firefox browsers assuming Edge is the Primary Browser for testing.
- c. Validate application behavior is consistent across all browsers.
- d. Validate browser-specific defects are fixed in all the browsers.

Note: Latest Browsers will be used for Cross-Browser testing as per agreement with NE DMV MMCIS.

5. Data Migration Testing

Data migration is a process that involves the migration of data from source to target. Along with data migration, it also needs to consider referential constraints (setting and populating master tables first) and setting up new data in a newly created table or attributes in the target database.

Testing must also validate that default values have been assigned to target fields where values are mandatory in the target but not available in the source.

Features to be tested:

Structured data and unstructured data will be validated as part of data migration testing.

Note:

- c. A complete list of structured and unstructured data to be migrated in the core systems will be captured in the data migration strategy document prepared by the data migration team.
- d. Sample validation of bulk uploads will be tested as part of data migration testing, the solution is not yet finalized, and the testing team will refer to the data migration strategy document prepared by the data migration team.

Approach:

- Structured data: Validate if the data from the source containing masked data from production is correctly transformed & migrated and is made available in the target applications according to the new solution.
- Checks such as database SQL queries, data verification through GUI (Celtic application), report analysis etc., will be performed to validate the migration process.
- Unstructured Data: Unstructured data will be migrated from the source (unstructured) to the target (structured) format as part of the unstructured data migration by the data migration

team. The testing team will validate the data in the target system for data integrity as provided in the mapping sheets.

6. Security Testing

The proposed CMCVS solution is deployed in multiple jurisdictions, and the product is compliant with IT industry security standards. However, we will be testing the customized product to verify that the CMCS solution meets the security standards according to NE DMV requirements. Security testing will be planned before go-live during the pilot testing phase.

The main objective of performing security testing is to ensure that the NE DMV MMCIS Solution is free from key OWASP Security Vulnerabilities.

Key Differentiators:

- The solution will be compliant to the OWASP (Open Web Security Project) and SANS 25 guidelines in our security testing services, along with PCI-DSS Standards as per the application-specific requirements.
- Static and Dynamic security analysis.
- Security testing SMEs compliance assessment with security standards.
- Experience in handling various security testing projects with complex business logic.

7. Performance Testing

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product is already compliant with industry-standard performance parameters. However, we will be doing Performance testing of the customized product to verify that the CMCS solution is meeting the performance standards according to NE DMV requirements. Performance testing will be planned before go-live during the pilot testing phase.

Performance testing will be done for in-scope applications and modules based on the feasibility analysis. It includes load, stress, endurance, and volume testing. Performance scripts will be developed in a dedicated integrated or pre-production environment, and the same will be used for execution in the respective environment. A production copy of the data will be loaded into the database prior to performance testing in the pre-production environment.

Business critical transactions, as well as high-volume transactions, will be identified for performance testing based on the criteria below.

- Peak hour user load
- Average hour user load
- Peak-hour transaction volumes
- Average hour transaction volumes
- Future volume forecast
- User concurrency
- Segregation of web and mobile load

Types of Performance Testing considered in scope:

• Load Test: To validate the performance when applied to peak load.

- Stress Test: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks.
- Endurance Test: To validate performance when applied to peak load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc.

We assume that the Production copy of data will be loaded into the database prior to performance testing in the pre-production environment by the NE DMV team. Performance testing will be carried out to emulate a production-like scenario where OLTP and batch execution will be executed. Also, the load will be distributed in accordance with the Non-Functional Requirements (NFR) that were provided to simulate the number of transactions and the user load. Based on non-functional requirements, a workload will be designed.

8. User Acceptance Testing

Celtic will provide support to NE DMV acceptance testers in setting up UAT test data, management of testing tools, defect tracking, and defect documentation. Training manuals will be leveraged for training users on the core system, in addition to training them on relevant testing tools.

UAT will have the following phases at the following high level:

- UAT strategy finalization for risk identification, prioritization, and creating a risk-based testing approach.
- UAT test planning and defining acceptance criteria.
- Helping to create business scenarios/ use cases/ scripts across all the areas of testing in scope.
- UAT environment set up.
- Set up test data for UAT and confirm that migrated data is available prior to testing.
- Test execution and defect reporting.
- Report the progress of test execution.
- Summarize test results and obtain signoff by NE DMV acceptance manager.

Testing Status Reporting:

As part of the project execution, a testing status report will be prepared for each planned test cycle that will provide a comprehensive report on the testing cycle for the application. This document consists of the following sections:

- Testing overview.
- Test results summary (Including defect summary).
- Analysis, conclusion, and recommendation on test cycle status.
- Azure DevOps (ADO) shall be used to track the project's progress from various viewpoints. It can be used to check the percentage of completion for test cases against the planned test cases and the pass/fail status of the test cases. It can also generate reports related to the number of open defects and other such reports.
- Weekly status reports: The status will be communicated weekly and will contain the completion status of planned activities for the week and future task planning.

- The defect report will be shared along with the test execution status during the execution phase.
- Defect status calls will be scheduled as part of the defect management process

f. Test Approach

The Contractor's testing approach shall include users early and often, and satisfy the following general requirements:

- i. Perform Integrated Performance Tests in an Environment Identical to Production The Contractor shall perform integrated Performance Testing on an infrastructure identical to the production infrastructure and shall demonstrate the solution and all components are tested to satisfying anticipated production conditions, including transaction volumes, peak loads, and security requirements as described throughout this RFP.
- ii. <u>Resolve Defects</u> The Contractor, NE DMV, and OCIO shall work together to document the definition of defect classifications as low, medium, high, and critical. All defects found during a test phase shall be classified. All defects classified as medium, high, or critical shall be fixed and satisfactorily tested prior to completion of the phase or entering into a new phase. The NE DMV has the final determination of which defects, of any classification, must be fixed prior to deployment.
- iii. Document and Report Test Results The Contractor shall document test results in a Test Report Document with detail and summary results of each of the tests. Contractor shall report on the status of testing at the end of each week throughout all phases.

Response: CMCS can scale out and scale up using additional Infrastructure provisioning. For NE DMV, the CMCS Solution has been sized considering 150 transactions per minute (average) with a Peak number of transactions to 900. Response time of Simple transactions is in the range of <3 second and medium workload transactions in the range of 2-4 seconds. For Bulk calculations, the response time will be higher.

Celtic will work collaboratively with NE DMV resources to resolve performance issues within the expected timeframes.

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product is already compliant with industry-standard performance parameters. However, we will be doing Performance testing of the customized product to verify that the CMCS solution is meeting the performance standards according to NE DMV requirements. Performance testing will be planned before Go-Live during the Pilot testing phase.

Based on the feasibility analysis, performance testing will be done for in-scope applications and modules. It includes Load, Stress, Endurance, and Volume testing. Performance Scripts will be developed in a dedicated integrated or Pre-production environment, and the same will be used for execution in the respective environment. A production copy of the data will be loaded into the database prior to performance testing in the pre-production environment.

Business-critical transactions as well as high-volume transactions will be identified for

performance testing based on the criteria below.

- Peak hour user load
- Average hour user load
- Peak-hour transaction volumes
- Average hour transaction volumes
- Future volume forecast
- User concurrency
- Segregation of external user load

Types of Performance Testing considered in scope:

- **Load Test**: To validate the performance when applied to peak load.
- **Stress Test**: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks.
- Endurance Test: To validate performance when applied to peak-load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc.

Transactions in scope are a mix of End-to-End scenarios (this may include web services) and a few background batches. Based on our understanding, 10% of the transaction flows have been considered for performance testing along with background batch scenarios. We assume that the Production copy of data will be loaded into the database prior to performance testing in the pre-production environment by the NE DMV team.

Performance testing will be carried out to emulate a production-like scenario where OLTP and batch processes will be executed. Also, the load will be distributed in accordance with the Non-Functional Requirements (NFR) that were provided to simulate the number of transactions and the user load. Based on non-functional requirements, a workload will be designed.

Testing Status Reporting:

As part of the project execution, a testing status report will be prepared for each planned test cycle that will provide a comprehensive report on the testing cycle for the application. This document consists of the following sections:

- Testing overview.
- Test results summary (Including defect summary).

- Analysis, conclusion, and recommendation on test cycle status.
- Azure DevOps (ADO) shall be used to track the progress of the project from various viewpoints. It can be used to check the percentage of completion for test cases against the planned test cases and the pass/fail status of the test cases. It can also generate reports related to the number of open defects and other such reports.
- Weekly status reports: The status will be communicated weekly and will contain the completion status of planned activities for the week and future task planning.
- The defect report will be shared along with the test execution status during the execution phase.
- Defect status calls will be scheduled as part of the defect management process

g. Statistical Sampling of Tests

The NE DMV requires all functions and requirements of the solution and its components be effectively tested. The NE DMV will consider the use of statistical sampling for Performance Testing only. With the exception of Performance Testing, the NE DMV will not approve a test plan which calls for statistical sampling of test cases.

Response: Celtic understands and will comply with this requirement. Other than performance testing, Celtic will run our CMCS COTS product test cases and modify test cases to meet NE DMV-specific business rules and workflows.

h. Testing Requirements – Tools and Systems

The Contractor's testing approach shall satisfy the following requirements at a minimum:

- i. <u>Establish Multiple Testing Environments</u> The Contractor shall set up a separate environment for testing and shall be able to create additional environments if required. The Contractor shall be responsible for the testing environment and refreshing the data and state of the environment for testing.
- ii. Use of Automated Testing Tools

The Contractor may utilize automated testing tools and provide the documented processes to support the testing phases and shall provide the testing tools and licenses for the solution. The Contractor shall provide evidence the proposed testing tools can perform the appropriate load and stress testing, are stable, and can handle the required throughput.

The Contractor shall provide training to NE DMV staff so they may participate productively in the testing process.

iii. <u>Defect Tracking System</u> The Contractor shall provide a defect tracking system to track all problems with the solution and its release components. The Contractor shall provide a mechanism for tracking expected versus actual test results and tracking all errors, problems, and resolutions. The Contractor shall obtain approval from the NE DMV for all reports and tracking/reporting processes.

Response:

Establish Multiple Testing Environments

Celtic proposed the following test environments and Activities performed in each environment:

Environment

Activities Performed

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System/Integration Test	 The testing team will use this environment This environment will provide end-to-end functionality, including integration with external/internal system Defects will be logged for the issues identified from this environment This will be the key environment from where the gating decision (Go-No-go) for UAT will be made
User Acceptance Testing	 Business users, and user acceptance testers will use this environment UAT defects will be logged for the issues identified from this environment This will be the key environment from where gating decisions (Go-No-go) for Production will be made
Sandbox/Training	• This environment will be used by the trainers to train the staff
Data Migration(Part of Dev)	 This environment will be used to perform data migration testing The testing will cover the testing of the functionality on the migrated data
Performance (Pre- Prod)	 This environment will be used for performance testing and bench marking of the system Performance issues will be logged as defects
Pre-Prod	 This will be a replica of the Production environment The support staff will pre-dominantly use this environment to trouble-shoot production issues

Use of Automated Testing Tools

Celtic has experience using tools including selenium, postman, JMeter, and NUnit for automated testing in our implementations.

Business critical transactions, as well as high-volume transactions, will be identified for performance testing based on the criteria below.

- Peak hour user load
- Average hour user load
- Peak-hour transaction volumes
- Average hour transaction volumes
- Future volume forecast
- User concurrency
- Segregation of web and mobile load

Types of Performance Testing considered in scope:

- Load Test: To validate the performance when applied to peak load.
- Stress Test: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks.
- Endurance Test: To validate performance when applied to peak load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc.

Defect Tracking System

Azure DevOps (ADO) shall be used to track the progress of the project from various viewpoints. It can be used to check the percentage of completion for test cases against the planned test cases and the pass/fail status of the test cases. It can also generate reports related to the number of open defects and other such reports.

i. Update Requirements Traceability Matrix, (Appendix A for Option 1, Appendix C for Option 2)

The Contractor will finalize and provide the updated and completed Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2), to the NE DMV providing the results of all testing, describing how each functional and technical requirement was met, what scenarios tested each functional and technical requirement, and defects identified/corrected.

Response: Celtic will build a Requirements Traceability Matrix (RTM) that will be used throughout the project to ensure all requirements are included in the solution and to ensure each requirement is cross-referenced to a product verification document (PVD), interface control document (ICD), and test case. Each test case will have corresponding test scenarios and test results associated with RTM.

j. Conduct Training

The Contractor is responsible for all aspects of developing a training program for all users defined below in the new system, including its design, maintenance, usage, operation, and support. The training scope shall include all MMCIS functions, sub-system functions, reports, and interfaces as documented in Appendix A, Requirements Traceability Matrix.

At a minimum, the Contractor shall:

- i. Conduct training activities through the completion of the warranty period.
- **ii.** Develop and update training courses and supporting materials necessary to meet training needs for implementation and ongoing operation of the solution and all its components.
- i. Provide robust methods to assist external users in navigating and using the system (i.e., help screens, tutorials, tool tips, etc.).
- **ii.** Develop, maintain, store, produce, update, and distribute all training materials. This includes materials for classroom training, online learning, and other learning aids.
- **iii.** Update and effectively communicate updates to training materials and training courses, especially as defects and workarounds are identified, and incremental functionality is deployed.

- iv. Develop metrics and mechanisms for evaluating the effectiveness of the training classes and overall training process. Implement changes as a result of information gathered.
- v. Develop tools and mechanisms for creating, populating, and refreshing training data representative of the legacy motor carrier information system data. The training data shall be sufficient to allow multiple users to be simultaneously trained using realistic scenarios they may encounter.
- vi. Continual update of training materials and training databases as new release components are deployed.
- vii. Provide training to the NE DMV for any specialized tools utilized for development of documentation.

Response:

Training Approach

Celtic believes in a holistic approach towards user training. One of the primary obstacles in user training is to increase the familiarity of all the users with a new system (process flow, transactions, navigation, overall user experience etc.).

Our implementation methodology includes deploying our Out of the Box version of the solution at the very beginning of the project. This gives a unique advantage to the users to work with the system throughout the implementation phase. This way, the users get an extended time period to get themselves familiarized with all the aspects of the modernized system and reduces the dependence on the formal training before *Go-Live*.

Celtic proposes a hybrid approach to cover the entire user base of NE DMV including external users

Classroom Training – Celtic trainers will train selected users from each user group in a classroom setting, either in person or online based on a mutually agreed plan.

Online Training – NE DMV's extended users can access the online training module (multimedia) and get trained. Celtic training team will be available for clarifications as and when needed.

We find this hybrid approach to be the most efficient one – both in terms of effectiveness as well cost/ effort optimization. Celtic uses its own Learning Management System (iLearn) which has comprehensive features to plan, deliver, track and evaluate effectiveness of training.

Training Plan

The key features of the training approach that will be documented in the Training Plan include the following:

<u>Approach</u> : This section will include the overall approach (user group selection, training sessions, content type, delivery mechanism, user group sizes etc.)

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<u>Outcomes</u> : This section will define the success criteria in terms what the users should be perform with the system

<u>Pre-requisites</u> : This section will capture all the activities that Celtic and NE DMV will have to complete before the start of the formal training process (e.g. training material, environment setup, scheduling training facilities, blocking users time etc.)

<u>Curriculum</u> : This section will outline the duration and agenda of recommended training for each user group including external users, Training group sizes and the overall training schedule

<u>Deliver Training</u>: Complete delivery of training sessions at the end of the system development between UAT and Go-Live.

<u>Track, Monitor, and Evaluate learning outcomes</u>: Monitor training effectiveness based on agreed assessment criteria. It is anticipated that the NE DMV will assign staff to administer, collect and tabulate the assessment information.

Training Materials, Manuals, Video Tutorials, and Web-based training: Celtic will use its tested product iLearn for the initial training period. iLearn is a web-based product that supports multimedia content with multiple delivery mechanisms, including – classroom, video-over-web, and self-learning for training a large audience.

- Celtic will create and provide training videos for a new Driver's License Process and for a Driver's License Renewal.
- Celtic has an existing set of training materials that can be modified to suit the needs of NE DMV via a review/ approval process.

The following diagram is a sample of the Celtic iLearn Course Home Page:

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ණී Dashboard	Last Accessed: Jul 19, 2018	Last Accessed: Jun 18, 2018	Last Accessed: May 31, 2018 Last Lessen: OIO Load & Dimensions
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🗯 Certificate	CTS-iLearn Overview	CPR 0%	CTS-IFTA Fundamentals
CTSLEARN™ © Copyright 2016, Celtic Systems All Rights Reserved.	You have not started this course. Please click on Start to visit the course.	You have not started this course. Please click on Start to visit the course.	You have not started this course. Please click on Start to visit the course.
version: 1.0.61318(2018-05-11)	Start →	Start -	Start →

k. User Training Roles

At a minimum, the Contractor shall develop all materials, planning, and processes to train the following types of users of the MMCIS. Unless otherwise noted, the Contractor shall perform all training of the following roles through completion of the warranty period:

- i. State Technical Staff: The Contractor shall train the State of Nebraska's technical staff with the tools and architectural information necessary for them to support, maintain, and enhance the system. See Knowledge Transfer for further details.
- ii. Nebraska DMV Users: The Contractor shall train the NE DMV users to execute the functions of the solution effectively and proficiently as related to internal NE DMV functions. The training shall include tools to measure if they are properly trained to operate the entire system. Specified NE DMV Users will need trained on administrative functions in a separate training session or sessions.
- viii. External End Users (MCS Carriers, Reporting Service Users): The Contractor shall train External End Users to execute the functions of the solution effectively and proficiently as related to internal NE DMV functions. The training shall include tools to measure if they are properly trained to operate the entire system.
- ix. Additional user types/roles may be identified during the course of the implementation. The NE DMV and Contractor shall assume some flexibility will be required to adjust the training plan and corresponding training materials as necessary to account for this.

Training shall simulate data flow to and from other systems when needed to demonstrate a function during training without disturbing production data (e.g., to simulate document imaging, IFTA and IDR interfaces).

The Contractor shall establish tools, data, refresh schedules, and anything else necessary to ensure instructors and students are provided with fresh data as needed for examples, exercises, and other class activities for each new class/training session.

The Contractor shall furnish instructions and tools and train the NE DMV designated representatives on how to update and refresh the training database and related materials. These instructions will be used by NE DMV trainers when preparing classes beyond the warranty period.

The Contractor is responsible for providing the NE DMV with login and access requirements associated with training.

x. <u>Deliver Training Documents</u>

The Contractor shall create training manuals, quick reference materials, and other educational materials to aide users in the learning process.

- a) Training materials shall include at a minimum: quick reference guides, user guides, how-to documentation, and FAQs, as appropriate.
- b) All training materials shall be stored in a mutually agreed upon location available to the Contractor and NE DMV staff.
- c) Training materials shall describe the NE DMV business and system processes, utilizing the State's terminology.
- d) Training materials shall be branded for the NE DMV.
- e) The NE DMV will own, and reserves the right to reproduce, all training materials and content for training and to make changes to training materials as necessary to improve training outcomes.
f)

Web-based courses, if applicable, shall be developed on standard tools to allow future handoff of material for the NE DMV to update.

Response: CMCS comes with detailed product documentation and training materials. Celtic team will update the materials with the modifications done specifically for NE DMV. Our training materials include:

- User Guides Extensive guide including instructions, screenshots, and navigation for each transaction/ feature.
- Online Help Integrated with the system including context specific help
- Training materials We deliver multimedia training materials (documents, presentations, and training videos (4 videos included in price)

Celtic will brand all the training materials with NE DMV logo.

I. Conduct Knowledge Transfer and Turnover Activities

The Contractor shall ensure the State Technical Staff and NE DMV users are able to support the MMCIS in accordance with the terms of System Maintenance. Knowledge transfer is an ongoing process which goes beyond classroom training.

- i. The Contractor shall develop an approach to include non-classroom knowledge transfer for the support and technical staff.
- **ii.** The Contractor shall monitor the effectiveness of knowledge transfer to the support and technical staff throughout the project. The Contractor shall provide regular progress reports to the NE DMV Project Administrator and Project Manager.
- **xi.** The Contractor shall specify any prerequisites to knowledge transfer activities. The Contractor shall specify these prerequisites as part of the initial Knowledge Transfer and Turnover Plan, allowing the NE DMV time to ensure the staff has necessary skill sets.
- **xii.** Knowledge transfer to the support and technical staff shall specifically include at a minimum:
 - a) A working knowledge of the new MMCIS environment.
 - **b**) A working knowledge of all technical and functional matters associated with the solution, its architecture, data files structure, interfaces, batch programs, and hardware or software tools utilized in the performance of this contract.
 - c) Documentation which lists and describes all hardware, if applicable, and software tools utilized in the performance of this contract.
 - **d)** A working knowledge of necessary utilities and software products used in support and operation of the solution and its components.

Response: Celtic will conduct a Knowledge Transfer of the CMCS solution to the NE DMV resources after the Go-live to assist them in becoming self-sufficient during the production support phase. Knowledge Transfer is a detailed process of planning, scheduling, imparting, and monitoring of transfer of knowledge and skills from Celtic to the NE DMV team. The goal of knowledge transfer is to provide the NE DMV team with the knowledge and skills of the new system to ensure the NE DMV team can assume service delivery responsibilities for the new CMCS solution. Knowledge transfer is not end-user training or communication activities. Identified resources must have a baseline set of skills prior to knowledge transfer activities, as knowledge

transfer does not include training on specific tools (SQL Management Studio, Visual Studio, etc.), performing data corrections, programming, hardware issues, or network issues.

Celtic will follow a structured approach to transitioning the knowledge of application services to the NE DMV team for the maintenance & operations Phase of the Project. The transition process can be typically depicted into phases mentioned in the below figure:



Transition Planning:

A detailed joint transition planning phase precedes the knowledge transfer Execution phase to baseline the approach, which focuses on developing the detailed topics, activities, schedule, and agreement on documentation requirements and acceptance plan, which will be signed-off on by NE DMV. Based on the schedule of activities, the SME availabilities are determined, and the invitations for the KT sessions and on-the-job, hands-on activities are sent out to all the stakeholders.

Classroom Training:

Celtic will provide training to enable the NE DMV team to gain a clear understanding of the daily activities performed by the different team members and provide the necessary support to the NE DMV team to take ownership of the activity.

- Celtic will initially provide pointers to various system knowledge artifacts, documentation, and reference materials such as source code, best practices, and standards to the NE DMV team to be able to take over the responsibility of the modernization maintenance activities.
- Celtic will also provide walkthrough sessions and demonstrations to NE DMV to gain an understanding of the changes made to existing systems as part of the release.

• Celtic will organize transition sessions into various groups and modules to deliver related topics based on skills and training needs.

To transfer pertinent knowledge to the required target team members, NE DMV will identify and provide the list of members assuming different roles and responsibilities.

- NE DMV team members will gain mastery of the activities along with the existing Celtic team members.
- The NE DMV team will have existing system documentation, various functional/technical design documentation, and operation manuals to accelerate learning the fine details necessary to perform the required activities and enhance the current system.
- Achieving sufficient current system knowledge and process details, the NE DMV team will start performing activities in parallel to Celtic.
- However, Celtic team members will still provide the primary support and consultation needed to perform business-critical processes for all warranty activities and resolve any issues until the end of warranty support.

Celtic will structure the training workshops for different stakeholder groups to cater to the different NE DMV teams' different knowledge requirements, such as the Functional, Technical, and QA teams.

On-the-Job Training (OJT):

During the On-the-Job Transition phase, the NE DMV Team will gain knowledge and model the activities performed for each specific module and then begin to participate in activities performed by Celtic.

- NE DMV and Celtic will work in parallel, with Celtic providing the support required to
 assume responsibility for assigned activities. Examples of these activities include the
 involvement of the NE DMV team in resolving warranty support tasks, analysis/fixing of
 low-priority warranty defects, deployment of software builds, and Testing activities.
- Celtic team members will still own the primary responsibility for all warranty activities, including daily tasks, resolution of defects/issues, and making decisions in this phase.

- However, the items assigned to NE DMV involving OJTs are excluded from Celtic's SLAs.
- At the end of this phase, the NE DMV team will be able to perform all required daily tasks with the help of Celtic.

OJT will be delivered through the following methods:

- Job Shadowing
- Mentoring/Coaching
- Deliverables review process

Acceptance:

Knowledge Transfer is considered completed upon:

- Completion of all the items identified in the KT Schedule.
- Sign-off by NE DMV Manager & Celtic Manager for completion of knowledge transfer sessions.

m. Deployment of System

Upon successful completion of all testing and training, the Contractor will deploy the solution according to the Contract, Scope of Work, and Project Management Plan. The Contractor will ensure adequate staff, as agreed upon, are available both on-site and remotely to support the deployment. Contractor will ensure the adequate number of on-site staff are available in Nebraska for a minimum of five business days following the deployment. The NE DMV reserves the right to extend on-site support at the time of deployment for issues categorized as Critical or Serious, as defined in the Service Level Agreement.

The NE DMV will accept deployment of the System upon resolution of all critical, serious, high, and medium issues, defined in the Service Level Agreement, as determined by the NE DMV.

Response: Celtic proposes a robust production roll out approach for NE DMV. The guiding principles for our production rollout approach are as follows:

- Plan releases in line with requirements resulting from approved changes
- Build effective release packages for the deployment of one or more changes in production
- Test release mechanisms to ensure minimum disruptions to the production environment
- Review preparation for the release to ensure successful deployment
- Deploy the release in line with structured implementation guidelines

Celtic proposes the production rollout approach shown below.

Rollout and Deployment Process	High Level activities
Rollout Planning	 Identify the scope and content of an approved change Perform risk assessments for the release and gain signoffs from designated groups/representatives Prioritize, plan, and schedule release activities Determine the resources and strategy for the release Document and track all release planning activities
Rollout Building	 Select a suitable release mechanism Design and build the release package in development and test environments Test the release package, and deliver the change in complete congruence with the requirements Ensure that the release package is updated to the configuration management database
Testing	 Design and build an accurate test environment that mimics the production Perform key functionality acceptance tests aligned to the requirements of the change and the release Perform controlled testing Evaluate acceptance testing results and signoff to make a confident move toward release preparation
Rollout Preparation	 Ensure adequate resources are available, training and user activity completion, etc. Prepare Implementation Plan Prepare Knowledge Transfer Plan Preparation for knowledge transfer sessions with the support team Complete End User Training Create Production Turn Over document and Troubleshooting guidelines Review the preparation and suitability of release for deployment into the production environment

Rollout Process	and	Deployment	High Level activities
			 Ensure all related changes have been handled by the change management process Deployment Readiness Assessment Report to be reviewed with all key stakeholders Make Go / No Go Decision for Production deployment
Rollout De	ploymer	nt	 Ensure users are trained and the acquisition of skills and knowledge are measured and documented Database creation and data migration activities Deploy the release into the production environment Open Production Environment for Smoke Testing Application Readiness Testing: smoke test and testing of key functionalities by business users Make Go / No Go Decision Evoke emergency Fix Procedure in case of issues (Rollback to previous production state if required) Review the deployed release Send Communication to all key stakeholders on the completion of the deployment

We recommend submitting a Production deployment readiness checklist Report by Celtic before every deployment during the Go/No-Go meeting. This report will provide a current readiness assessment considering staff, business processes, and systems before making a Go decision on deployment. Below is a sample report template.

1) Readiness Assessment Matrix – Staff

Topic Area	Core Recommendations	Readiness Level
End-User Readiness: Application Users Training		Green 🗸
Support Readiness: Application Support Personnel Training		Green 🗸
Support Readiness: Infrastructure Support Staff Training		Green 🗸

2) Readiness Assessment Matrix – Business Practices

Topic Area	Core Recommendations	Readiness Level
Solution Readiness: Complete User Acceptance Test		Green 🗸
Solution Readiness: Complete Performance Test		Green 🗸

3) Readiness Assessment Matrix – Systems

Topic Area	Core Recommendations	Readiness Level
Technical Infrastructure Readiness: Production Environment Installed and Configured		Green 🗸
Technical Infrastructure Readiness: Rollback Plan		Green 🗸

Before deployment, NE DMV and the Celtic team will sign this certification report.

n. Deliver System Documentation

The Contractor shall develop and provide the manuals described below. The Contractor shall provide to the NE DMV any specialized tools utilized for development and maintenance of the manuals. The Contractor shall provide training to the NE DMV for the specialized tools utilized.

The Contractor shall maintain and update the manuals through the end of the warranty period. The NE DMV will maintain and update the manuals after completion of the warranty period.

i. Systems Operations Manual

The Contractor shall develop a Systems Operations Manual which documents technical and administrative functions in the system. It shall clearly define the troubleshooting steps associated with the solution, support processes, and problem workarounds for the system.

The Systems Operations Manual shall include at minimum:

- a) Database models with explanations of key relationships
- b) Security protocols and user administration
- c) Interface protocols
- d) System Configuration Processes
- e) Troubleshooting
- f) Firewall rules
- **g)** Other relevant administration sections needed to maintain the Contractor's architecture

xiii. System User Manual(s)

The Contractor shall deliver a User Manual(s) documenting all features of the system. The user manual(s) shall be written in a format which includes the following sections:

- a) Overview and purpose of the function
- b) Prerequisites for initiating the function (IFTA returns, IRP registration, etc.)
- c) Steps to complete the function
- d) Expected output upon completion
- e) Common alternative workflows with references to the appropriate section of the user manual(s)
- f) Administrator-level NE DMV User support functions

Response: Celtic has developed systems operational manual for our existing customers with information required by NE DMV. During the implementation phase, we will update our system operation manual to include NE DMV specific information.

CMCS COTS products system user manuals include all sections required by NE DMV. During the implementation phase, we will update user manuals to include NE DMV specific configurations, customizations, business rules, and workflows.

o. Project Closeout Meeting

At the completion of Segment 2: Perform Implementation, the Contractor will conduct a project closeout meeting. The meeting will be held to discuss the conclusion of the project, lessons learned, and any follow-up points or tasks. The meeting will be held in person at NE DMV's offices in Lincoln, Nebraska, unless otherwise agreed to by the NE DMV. The Contractor shall prepare an agenda for the meeting and distribute to all attendees at least forty-eight hours prior to the meeting.

Response: Celtic understands and shall comply with this requirement.

p. Document Lessons Learned and Complete Project Closeout Report

The Contractor shall survey or by other means ask an agreed-upon number of users or stakeholders for lessons learned, compile and report lessons learned, and complete a Project Close Out Report detailing lessons learned, project results and a determination of how closely the project adhered to its initial scope, schedule, and cost. The NE DMV and Contractor will mutually agree upon the format of the Project Close Out Report.

Response: Celtic has maintained a log of risks identified over the life of the project, including those that have passed and are no longer a threat to the project, those that have been prevented or mitigated, and those that have become issues. This log is a permanent record of project risks and provides an on-going trail of lessons learned for future projects.

The following is	a sample log that	has been derived from	lessons learned	on previous projects:
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Risk Description	Impact	Mitigation
Go-Live date	High	 DMV to ensure support for final cut-over DMV team and pilot Customer's availability during UAT, training, and implementation plan
External Data Interface	Medium	 Approval from external agencies (financial system, data consumption) DMV and Celtic team to plan for full implementation in parallel If there is any delay, the Celtic team will work with the DMV on the alternate ways
Subject Matter Experts	Medium	• DMV team to plan their availability and holiday plans for the project implementation

		Mandatory sandbox participation
Timely Deliverables Approval	Medium	 Ensure all critical items are addressed during weekly Cadence meetings Where required, the Celtic team to reach out to the DMV critical stakeholders for immediate decision and action DMV and Celtic team to work collaboratively and provide review/feedback as per timelines stated in the project plan
System Testing	High	• DMV users and pilot Customers complete their testing as scheduled
Interfaces	High	• DMV and Celtic team to work together on the identified interface requirements, with minimal impact on the go-live date

3. SEGMENT 3: WARRANTY, MAINTENANCE, AND SERVICE LEVEL AGREEMENT

Contractor shall provide warranty and maintenance services, and adhere to the Service Level Agreement as follows:

a. Warranty Services

The warranty period shall last a minimum of 18 months from the date of acceptance of deployment of all Advanced Services as defined in the Scope of Work.

Contractor shall honor the warranty on software, the solution, and professional services.

The support hours of operation will require the Contractor to support personnel with all system questions or issues. Support shall be available 24 hours a day, 7 days a week, excluding the following holidays:

- i. New Year's Day
- ii. Memorial Day
- **xiv.** Independence Day
- xv. Labor Day
- xvi. Thanksgiving
- xvii. Christmas

The warranty shall include, but not be limited to, the following services:

- i. Managed services: Any software provided must be supported by the Contractor according to the Service Level Agreement.
- **ii.** Problem-based consultative support (commonly known as help desk support or technical support): The Contactor is required to assist or provide technical consultative support to NE DMV users based on a level of degree of severity.

- **xviii.** Training: The Contractor is required to provide training to authorized NE DMV Users and State Technical Staff for advanced services, enhancements, or significant system updates.
- **xix.** Software Updates: Contractor is responsible for providing updates to all software it provides, as warranted, including patches, hotfixes, and version updates.
- **xx.** Maintaining compliance with NITC Standards.

Response: As a part of our warranty, support, and maintenance process, Celtic shall follow a service level agreement to provide all necessary ongoing service, support, configurations, system changes, maintenance, monitoring, issue resolutions, error corrections, and releases.

Celtic will on-board sufficient support teams to satisfy the 90% resolution rate for the first call and to handle high call volumes during the system rollout.

Support and Maintenance management requires defining, following, and monitoring at various levels, Level 1 (L1), Level 2 (L2), and Level 3 (L3) support.

Level 1 Support:

The L1 support is through our incident tracking system.

Level 2 Support:

Celtic will provide dedicated technical support personnel for managing both the business and performance aspects of the contract.

Celtic will perform the following activities as part of L2 support:

- Provide a quick First-Level Resolution (FLR)
- Compliance with the response time
- On-time routing of the required incidents
- Resolving common incident types quickly using issue resolution procedures
- Maintain compliance with NITC
- Reporting results of root cause analysis to identify stakeholders within defined timeframes for priority incidents
- Prepare status reports and attend a monthly service review meeting

Level 3 Support:

When no resolution is found at L2 support, the Celtic team and the NE DMV team will work together to resolve issues that may involve the NE DMV network.

CMCS provides a fully integrated on-line use guide for all system functions. An online contextsensitive help functionality is also available on all applicable screens. The Frequently Asked Question (FAQ) feature provides users with detailed answers and screen shots to help users through specific scenarios. As and when any changes are done to the system, user manuals and FAQs are updated for the related sections.

Release/Deployment Frequency:

Celtic will work with the agency to come up with a matrix that will help determine deployment frequency. The matrix will consider various factors such as the type of fix (hot fix / new features/ product upgrade/ maintenance release), severity, and the priority of the defect or functionality to come up with the release frequency.

	Severity	Priority	Frequency	Duration
Hot fix	High	High	Immediate	1 Hr.
New Features	Medium	High	Quarterly	4-6 Hrs.
System Upgrade	Medium	Medium	Depends on the Road map	8-24 Hrs.
Maintenance Release	Medium	Medium	Monthly	2 Hrs.

Here is a typical matrix. This may vary for NE DMV.

Training:

Celtic will develop training course material as per the training plan, and curriculum - such as materials for Instructor-led training, eLearning, business-specific quick reference guides, and exercises will be created. Celtic will present a "dry run" training presentation to the NE DMV staff for further use.

b. Maintenance Services

Maintenance for system software will commence on the day following expiration of the warranty period. The support hours of operation will require Contractor to support personnel with any system questions or issues. Support shall be available 24 hours a day, Monday – Saturday, excluding the following holidays:

- i. New Year's Day
- ii. Memorial Day
- xxi. Independence Day
- xxii. Labor Day
- xxiii. Thanksgiving
- xxiv. Christmas

Maintenance shall include the following services:

- i. Managed services: Any software provided must be supported by the Contractor according to Service Level Agreements.
- **ii.** Problem-based consultative support (commonly known as help desk support or technical support): The Contactor is required to assist or provide technical consultative support to State Technical Staff based on a level of degree of severity.
- **xxv.** Training: The Contractor is required to provide training to NE DMV users and State Technical Staff for enhancements or significant system updates.

- **xxvi.** Software Updates: Contractor is responsible for providing updates to all software it provides, including patches, hotfixes, and version updates.
- **xxvii.** Maintaining compliance with NITC Standards.

Response: As a part of our warranty, support, and maintenance process, Celtic shall follow a service level agreement to provide all necessary ongoing service, support, configurations, system changes, maintenance, monitoring, issue resolutions, error corrections, and releases.

Celtic will on-board sufficient support team to satisfy the 90% resolution rate for the first call and to handle high call volumes during the system rollout.

Support and Maintenance management requires defining, following, and monitoring at various levels, Level 1 (L1), Level 2 (L2), and Level 3 (L3) support.

Level 1 Support:

The L1 support is through our incident tracking system.

Level 2 Support:

Celtic will provide dedicated technical support personnel for managing both the business and performance aspects of the contract.

Celtic will perform the following activities as part of L2 support:

- Provide a quick First-Level Resolution (FLR)
- Compliance with the response time
- On-time routing of the required incidents
- Resolving common incident types quickly using issue resolution procedures
- Maintain compliance with NITC
- Reporting results of root cause analysis to identify stakeholders within defined timeframes for priority incidents
- Prepare status reports and attend a monthly service review meeting

Level 3 Support:

When no resolution is found at L2 support, the Celtic team and the NE DMV team will work together to resolve issues that may involve the NE DMV network.

CMCS provides a fully integrated on-line use guide for all functions of the system. An online context-sensitive help functionality is also available on all applicable screens. The Frequently Asked Question (FAQ) feature provides users with detailed answers and screen shots to help users through specific scenarios. As and when any changes are done to the system, user manuals and FAQs are updated for the related sections.

Release/Deployment Frequency:

Celtic will work with the agency to come up with a matrix that will help determine deployment frequency. The matrix will consider various factors such as type of fix (hot fix / new features/ product upgrade/ maintenance release), severity, and the priority of the defect or functionality to come up with the release frequency.

	Severity	Priority	Frequency	Duration
Hot fix	High	High	Immediate	1 Hr.
New Features	Medium	High	Quarterly	4-6 Hrs.
System Upgrade	Medium	Medium	Depends on the Road map	8-24 Hrs.
Maintenance Release	Medium	Medium	Monthly	2 Hrs.

Here is a typical matrix. This may vary for NE DMV.

Training:

Celtic will develop training course material as per the training plan and curriculum - such as materials for Instructor-led training, eLearning, business-specific quick reference guides, and exercises will be created. Celtic will present a "dry run" training presentation to the NE DMV staff for further use.

c. Service Level Agreement (SLA)

The Service Level Agreement (SLA), as stated, is required to support, and sustain the MMCIS. This SLA shall be in effect upon contract start date and remain in effect until superseded by a revised agreement mutually agreed to by the NE DMV and Contractor or the termination or expiration of the contract. The Contractor shall be responsible for complying with all SLA requirements and shall ensure compliance by all Subcontractors.

Failure to meet SLA requirements shall result in a credit to the NE DMV of Service Level Agreement Credit (SLA Credit) set forth below. The parties agree assessment of an SLA Credit shall be construed and treated by the parties not as imposing a penalty upon the Contractor, but as compensation to the NE DMV for the Contractor's failure to timely deliver the contracted services or required quality of service.

i. Severity Levels to support and sustain the MMCIS System

The severity levels contained in Table 4 will be utilized to adequately identify and prioritize work so issues may be resolved based upon the level of significance and impact to the system and users. The severity level will be determined by the NE DMV. For the purposes of the SLA, business hours are defined as 6:00 a.m. CST to 6:00 p.m. CST Monday through Friday excluding holidays, anything outside of that time frame (including holidays) is considered non-business hours. This table is also used for the Option 1 requirement of the fully integrated document management system (Section F., below)

Table 4. Severity Levels to Support MMCIS

No.	Severity	Level Definition	Response Time	Resolution Time
	Level			

1	Critical	System is completely unusable and/or unavailable.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	1-6 months after deployment of the system: 6 hours2) 7 months or longer after deployment of the system or later: 4 hours
2	Serious	A system problem which creates inaccurate data and/or prevents the performance of key business process or processes.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	6 hours
3	High	A system defect or outage which reduces the effectiveness of a key business process, system performance, or usability of the system for which there is an acceptable short-term work-around during the designated resolution time.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	24 hours
4	Medium	A system problem or defect which has moderate impact on business processes, system performance, or usability of the system for which there is an acceptable work around during the designated resolution time.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	120 hours
5	Low	A system change which would improve the performance, efficiency, or usability of the system but does not require immediate attention.	Within 48 hours of support request.	Timeframe as agreed upon by the NE DMV and Contractor.
6	Ticket confirmation and updates	Confirmation of service request and update to each support ticket or action taken.	Confirmation: Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours. Update: Within 24 hours of action.	As per the identified SLA severity or issue.
7	Contractor owned and licensed software	Software and operating system owned and licensed by the Contractor on the state-owned server hardware.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	 1) 1-6 months after deployment of the system: 4 hours 2) 7 months or longer after deployment of the system or later: 2 hours
8	User Interface Software	Items included may be desktop clients and web and mobile applications.	Within 15 minutes of support request during business hours, within 1 hour of support request during non-business hours.	1-6 months after deployment of the system: 4 hours 7 months or longer after deployment of the system or later: 2 hours

Table 5. Service Level Requirements to Support MMCIS			
No.	Service Level	System Metric	Required System
	Requirement		Response
1	System	Monthly average system response time shall average one	100% of system
	Response	second or less. The response time will be measured as the time	responses to be < 1
	Time- Absolute	from when the user presses enter until the screen refresh in	second.
		response is complete. Response time shall be measured from	

		end-user devices and on internet and shall exclude network latency. Average response time shall be calculated including all system interactions. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	
2	System Response Time- Hours of Operation	Monthly average system response time during hours of operation serving customers (6:00 a.m. – 6:00 p.m., Central Time) shall be less than two seconds for 95% of all interactive system transactions. Response time is measured as the time from when the user presses enter until the screen refresh in response is complete, excluding interactions covered by SLA #11, 12, 13, and 14. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	95% of system responses to be < 2 seconds.
3	Search and lookup system response time	System maximum response time for each search and look up performance shall be three seconds or less 95% of the time and no single transaction shall exceed 15 seconds, except for specified and agreed upon exclusions. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	95% of system response to be < 3 seconds and no single transaction > 15 seconds.
4	Dashboard report System response time	System maximum response time for any Dashboard report shall be five seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	95% of System responses to be 5 seconds.
5	Static Standard Report response time	System maximum response time for any Static Standard Report shall be less than five seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	95% of System responses to be < 5 seconds.
6	Parameter- based report response time	System maximum response time for any report other than those set forth in SLA's #12 and 13 above shall be less than 10 seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level as determined by the NE DMV.	95% of system responses to be < 10 seconds.
7	System Availability	The system shall be operational and supported every calendar day of the year and 24 hours every day. The system shall be designed to meet a 99.9% system availability requirement, exclusive of planned downtime for system maintenance and upgrades. System maintenance and upgrades shall only occur	System shall be available >99.9%

during non-operational hours, outside of any batch-processing	
window, and shall not require the system to be unavailable of	
limited in functionality for more than one nour per week. This	
includes end-to-end system availability for all software,	
hardware, and communications interfaces between the system	
and all other systems. Failure to meet this requirement within the	
monthly reporting period shall result in being classified and	
managed with appropriate severity level as determined by the	
NE DMV.	

Response: Celtic has read and understands NE DMV's Service Level Agreement (SLA) for the support service. During the project's implementation phase, we will work with NE DMV team to finalize the mutually agreed SLA.

d. Service Level Agreement Credit (SLA Credit)

If the Contractor fails to meet an SLA requirement (Definition, Response Time, Resolution Time, System Metric, or Required System Response) within the allotted timeframe it will result in a credit to the Monthly Installment payable by the NE DMV during the month of failure. Such credit is calculated by applying the applicable Allocated SLA Credit percentage to the Monthly Installment Fee. The NE DMV may deduct such SLA Credit from any money payable to the Contractor. The applicable SLAs and credits have been identified in the table below.

Example calculation of an Allocated SLA Credit: If the Monthly Installment were \$100,000 and one SLA did not meet the required resolution time within the month, with an applicable 2% Allocated SLA Credit, the credit to the monthly invoice would be \$2,000, and the NE DMV would pay a net Monthly Installment of \$98,000.

Example application of an Allotted SLA Credit: If a request for support of a High Severity Level issue is received by the Contractor at 11:45 a.m., Monday at 11:46 a.m. on Tuesday the 2% SLA Credit will apply. At 11:46 a.m. on Wednesday, the 1% SLA Credit per every 24 hours will apply and will continue until resolved. This table is also used for the Option 1 requirement of the fully integrated document management system (Section F., below)

The reductions will be cumulative for each missed service requirement. In the result of a catastrophic failure affecting the entire MMCIS, all affected SLAs shall be credited to the NE DMV. In no event shall the maximum amount deducted for SLA Credits in any contract year exceed 20% of the total payment to the Contractor.

The parties agree to the following SLA Credits presented in **Table 6** for the ongoing support and maintenance of the MMCIS:

No.	Severity Level	Definition	SLA Credit	SLA Credit per every 24 hours past the SLA Resolution Time
1	Critical	System is completely unusable and/or unavailable.	5%	1%
2	Serious	A system problem which creates inaccurate data and/or prevents the performance of key business process or processes.	4%	1%
3	High	A system defect or outage which reduces the effectiveness of a key business process, system performance, or usability of the system which there is an acceptable short- term work around during the designated resolution time.	2%	1%

Table 6. Service Level Agreement Credits

4	Medium	A system problem or defect which has moderate impact on business processes, system performance, or usability of the system which there is an acceptable work- around during the designated resolution time.	1%	1%
5	Low	A system change which would improve the performance, efficiency, or usability of the system but does not require immediate attention.	NA	NA
6	Ticket Confirmation and updates	Confirm of service request and update to each support ticket of action taken.	Measure and report only	NA
7	Contractor owneo and licensed software	Software and operating system owned and licensed by the Contractor on the state-owned server hardware.	Dependent on the Severity Level identified	1%, unless identified as a low severity level.
8	User Interface Software	Items included may be desktop clients and web and mobile applications.	Dependent on the Severity Level identified.	1%, unless identified as a low severity level.
No.	Service Level Requirement	Requirement Definition	SLA Credit	SLA Credit per every 24 hours past the SLA Response and Resolution Time
9	System Response Time- Absolute	Monthly average system response time shall average one second or less. The response time will be measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Average response time shall be calculated, including all system interactions. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	5%	1%
10	System Response Time- Hours of Operation	Monthly average system response time during hours of operation serving customers (6:00 a.m. – 6:00 p.m., Central Time) shall be less than two seconds for 95% of all interactive system transactions. Response time is measured as the time from when the user presses enter until the screen refresh in response is complete, excluding interactions covered by SLA #11, 12, 13, and 14). Response time shall be measured from end- user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	5%	1%

	Search and lookup System response time	System maximum response time for each search and look up performance shall be three seconds or less 95% of the time and no single transaction shall exceed 15 seconds, except for specified and agreed upon exclusions. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	5%	1%
12	Dashboard report System response time	System maximum response time for any Dashboard report shall be five seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	1%	1%
13	Static Standard Report response time	System maximum response time for any Dashboard report shall be five seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	1%	1%
14	Parameter- based report response time	System maximum response time for any report other than those set forth in SLA's #12 and 13 above shall be 10 seconds, 95% of the time. The response time is measured as the time from when the user presses enter until the screen refresh in response is complete. Response time shall be measured from end-user devices and on Internet and shall exclude network latency. Failure to meet this requirement within the monthly reporting period shall result in being classified and managed with appropriate severity level.	1%	1%
15	System Availability	The system shall be operational every calendar day of the year and 24 hours every day. The system shall be designed to meet a 99.9% system availability requirement, exclusive of planned downtime for system maintenance and upgrades. System maintenance and upgrades shall only occur during non- operational hours, outside of any batch processing window, and shall not require the	5%	1%

system to be unavailable or limited in functionality for more than one hour per week. This includes end-to-end system availability for all software, hardware and communications interfaces between the system and all other systems. Failure to meet this requirement within the monthly reporting	
period shall result in being classified and managed with appropriate severity level.	

Response: Celtic has read and understands NE DMV's Service Level Agreement (SLA) Credit policy. During the project's implementation phase, we will work with the NE DMV team to finalize the mutually agreed SLA Credit Policy.

e. Escalation Procedures for Unmet SLAs

The Contractor shall provide the contact information for the individual(s) to be contacted by the NE DMV if an SLA requirement is not met and the issue(s) require(s) escalation. The Contractor must maintain correct and current SLA data during the contract period. If the resolution to the issue requires a change to a system feature(s) or function(s) in order to resolve the problem, the Contractor must notify the NE DMV designee immediately, and request approval within the designated resolution time.

Response: Celtic and the NE DMV shall document key contacts that will participate in review, service escalations, and generate customer communications as required.

f. Monitoring and Reporting of SLAs

The success of the SLAs depends fundamentally on the ability to measure performance accurately, ensuring credible and reliable information is available and provided to the NE DMV.

During SLA performance monitoring, actual levels of response, resolution, and system performance will be compared with the agreed SLAs. The Contractor shall measure each SLA and provide a detailed report(s) to the NE DMV. The Contractor shall provide the NE DMV with the following reports and tools regarding the provided SLA services:

i. <u>Performance Metric Tool</u>

The Contractor shall implement and make available to the NE DMV such system tools, and procedures necessary to:

- a) Measure, monitor, and verify Contractor's and/or Subcontractor's performance of the SLA requirements.
- b) Submit reports as indicated on a monthly and annual basis with sufficient detail to verify compliance with the SLA requirements.
- c) Provide the NE DMV access to measurement and monitoring systems, tools, and procedures.

xxviii. Monthly Service Level Agreement Status Report

The Contractor shall provide a detailed report which will include all data necessary to fully calculate the SLA results to the NE DMV. The monthly report will be provided within 10 calendar days following the last day of each month.

Annual Service Level Agreement Report

The Contractor shall provide to the NE DMV, on a scheduled annual basis, a report to show the annual SLA response and resolution times and services, and meet annually with the NE DMV to review the following:

- a) Service level results
- b) Delivery process
- c) Improvements in the system delivery process

d) Status of outstanding failures, errors, and system issues

e) Possible improvements or other revisions to the service levels

Response:

Azure DevOps (ADO) shall be used to track the progress of the project from various viewpoints. It can be used to check the percentage of completion for open issues and the pass/fail status of the issues released for testing. It can also be used for generating reports related to the number of defects open and other such reports.

Celtic will develop, and present monthly status reports for progress and issue tracking, reporting, and management, including:

- 1. Identification of key issues, enhancements, and remediation strategies in the issue tool.
- 2. Follow the established escalation process to foster communication for relevant stakeholders. NE DMV will collaborate with Celtic to define the specific escalation path and reporting requirements.
- 3. Get inputs from project stakeholders to include their issues as part of status reporting.
- 4. Release status and future release plan.

D. CHANGE MANAGEMENT

This RFP is for services that are fluid in nature. As such, there will be natural project dynamics built into the process as well as outside change management that will need to be addressed. Bidder must complete and submit Form D Project Rates to be used in the Change Management Process.

1. NANTURAL PROJECT DYNAMICS

Due to the dynamic nature of this RFP and the resulting Contract, the percentage of time spent on the items delineated in this RFP will be fluid, with greater emphasis being put on different areas at different times. There may arise from time to time a need for work not originally delineated in this RFP but considered within the scope of work as it relates to technology. This additional work may stem from legislative mandates, emerging technologies, and/or secondary research not otherwise addressed in this RFP or known at the time this RFP was issued.

Response: Celtic understands and shall comply with this requirement.

2. Change Management Process

The Contractor shall prepare a written description of the work required due to the change and an itemized cost sheet for the change. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's proposal, were foreseeable, or result from difficulties with or failure of the Contractor's proposal or performance.

No change shall be implemented by the Contractor until approved by the State, and the Contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

Response: Celtic understands and shall comply with this requirement.

E. DELIVERABLES

A table of project Deliverables is provided in **Table 7** below:

Table 7. Deliverables

Project Deliverables are provided in this section. Deliverables require the written	approval of the NE DMV will
provide for measuring project progress, and may provide the basis for payment to the	approval of the NE Diviv, will
SEGMENT 1: PROJECT PLANNING AND MANAGEMENT	
Deliverable	RFP section
Proposal and RFP Review Meeting	Segment 1.1
Project Kickoff Meeting(s)	Segment 1.2
Project Management Plan and sub-plans	Segment 1.3
Scope and Change Management	Segment 1.3.i.
Master Project Schedule and Schedule Management	Segment 1.3.ii
Resources Management Plan	Segment 1.3.iii
Communications Management	Segment 1.3.iv
Risk and Issue Management	Segment 1.3.v
Meeting Management	Segment 1.3.vi
Status Meetings and Reporting	Segment 1.4
Weekly Core MMCIS Project Team Status Meetings	Segment 1.4.a
Monthly Executive Support Team Meetings	Segment 1.4.b
Bi-Weekly Written Status Reports	Segment 1.4.c
Project Tracking	Segment 1.4.d
Project Issues Log	Segment 1.4.d.i
Project Change Log	Segment 1.4.d.ii
Project Risk Log	Segment 1.4.d.iii
Project Action Items Log	Segment 1.4.d.iv
Project Decision Items Log	Segment 1.4.d.v
Approval of Deliverables	Segment 1.5
Deliverable Acceptance Process	Segment 1.6
Problem Escalation Procedure	Segment 1.7
System Implementation/Performance Project Planning and Management	Segment 1.8
Data Plan (Data Clean-up, Migration and Conversion)	Segment 1.8.a
Design and Technical Architecture Document	Segment 1.8.b
Interface Plan	Segment 1.8.c
Testing Plans	Segment 1.8.d
Unit and System Test Plan	Segment 1.8.d.i
User Acceptance Test Plan	Segment 1.8.d.ii
Performance Test Plan	Segment 1.8.d.iji
Vulnerability Test Plan	Segment 1.8.d.iv
Regression Test Plan	Segment 1.8.d.v
Compatibility Test Plan	Segment 1.8.d.vi
Release Plan	Segment 1.8.e
Training Plan	Segment 1.8.f
Knowledge Transfer and Turnover Plan	Segment 1.8.g
SEGMENT 2: PERFORM IMPLEMENTATION	,
Conduct Gap Analysis and Gap Analysis Report	Segment 2.1
Conduct Data Clean-up, Conversion and Migration, and Conversion Report	Segment 2.2
Update Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for Option 2)	Segment 2.3
Build the Solution	Segment 2.4
Build Interfaces	Segment 2.5
Build System Integrated Help Function	Segment 2.6
Conduct Testing	Segment 2.7
Unit Testing	Segment 2.7.a
Systems Testing	Segment 2.7.b

User Acceptance Testing	Segment 2.7.c
Performance Testing	Segment 2.7.d
Vulnerability Testing	Segment 2.7.e
Data Conversion	Segment 2.7.f
Regression Testing	Segment 2.7.g
Legacy Systems Compatibility Testing	Segment 2.7.h
Solution Compatibility Testing	Segment 2.7.i
Test Approach	Segment 2.8
Perform Integrated Performance Tests in an Environment Identical to Production	Segment 2.8.a
Resolve Defects	Segment 2.8.b
Document and Report Test Results	Segment 2.8.c
Statistical Sampling of Tests	Segment 2.9
Testing Requirements – Tools and Systems	Segment 2.10
Establish Multiple Testing Environments	Segment 2.10.a
Use of Automated Testing Tools	Segment 2.10.b
Defect Tracking System	Segment 2.10.c
Update Requirements Traceability Matrix (Appendix A for Option 1, Appendix C for	Segment 2.11
Option 2)	-
Conduct Training	Segment 2.12
Deliver Training Documents	Segment 2.12.i
Conduct Knowledge Transfer and Turnover Activities	Segment 2.13
Deployment of System	Segment 2.14
Deliver System Documentation	Segment 2.15
Systems Operations Manual	Segment 2.15.a
System User Manual(s)	Segment 2.15.b
Project Closeout Meeting	Segment 2.16
Document Lessons Learned and Complete Project Close Out Report	Segment 2.17
SEGMENT 3: WARRANTY, MAINTENANCE AND SERVICE LEVEL AGREEMEN	Т
Warranty Services	Segment 3.1
Maintenance Services	Segment 3.2
Service Level Agreement	Segment 3.3
Service Level Agreement Credit	Segment 3.4
Escalation Procedures for Unmet SLAs	Segment 3.5
Monitoring and Reporting of SLAs	Segment 3.6
Performance Metric Tool	Segment 3.6.a
Monthly Service Level Agreement Status Report	Segment 3.6.b
Annual Service Level Agreement Report	Segment 3.6.c

Response: Celtic understands and shall comply with this requirement.

F. OPTION 1 SPECIFIC REQUIREMENTS

Provider is bidding Option 1:

1. Document Management Service Level Agreement (SLA)

The Service Level Agreement (SLA), as stated, is required to support and sustain the fully integrated document management system as part of the MMCIS. This SLA shall be in effect upon contract start date and remain in effect until superseded by a revised agreement mutually agreed to by the NE DMV and Contractor or the termination or expiration of the contract. The Contractor shall be responsible for complying with all SLA requirements and shall ensure compliance by all Subcontractors.

2. This severity levels contained in Table 4 (Segment 3.3.a above) and the SLA Credit structure contained in Table 6 (Segment 3.4 above) shall apply to this agreement as well.

Tabl	Table 8. Document Management Service Level Agreement			
No.	Service Level Requirement	Required System Functionality	System Metric	

1	Availability	Documents shall be available every calendar day of the year and 24 hours every day.	Documents shall be available >99.9%
2	Readability	Documents shall be able to be displayed and read within the application window or screen with minimal user interaction (zooming in, panning right or left, etc.)	95% of document retrievals will result in a readable view without user interaction
3	Retrieval Time	Documents shall be retrieved in a workable amount of time.	95% of retrievals will be completed within 5 seconds.
4	Upload/Import Time	Documents shall be uploaded in a workable amount of time.	95% of retrievals will be completed within 5 seconds.
5	Annotations/Fo rm Overlays	Annotations and Form Overlays shall be rendered in a workable amount of time.	95% of Overlays and Annotations will be rendered within 5 seconds.
6	Automatic Indexing	System shall automatically save and index all system generated correspondence. (renewal notices, notification letters, etc.)	100% of system generated correspondence shall be saved and indexed upon creation
7	Manual Indexing	System shall allow NE DMV users to index files with minimal interaction? Scanned or uploaded through the system?	95% of documents shall be able to be indexed with a
8	Document Access Fees	System shall allow unlimited, free upload, view, & download access to all documents.	100% of documents stored on the system shall be accessible at no charge.

Response: Celtic understands and shall comply with this requirement.

VI. PROPOSAL INSTRUCTIONS

This section documents the requirements that should be met by bidders in preparing the Technical and Cost Proposal. Bidders should identify the subdivisions of "Project Description and Scope of Work" clearly in their proposals; failure to do so may result in disqualification. Failure to respond to a specific requirement may be the basis for elimination from consideration during the State's comparative evaluation.

Proposals are due by the date and time shown in the Schedule of Events. Content requirements for the Technical and Cost Proposal are presented separately in the following subdivisions: format and order:

G. PROPOSAL SUBMISSION

3. CORPORATE OVERVIEW

The Corporate Overview section of the Technical Proposal should consist of the following subdivisions:

a. BIDDER IDENTIFICATION AND INFORMATION

The bidder should provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

Response:

Company Name	Celtic Cross Holdings, Inc dba Celtic Systems
Address of the company's headquarter	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260
Entity Type	Corporation
State of Incorporation	Arizona
Registration Year	2003

There is no change in Celtic's name, and form since our inception in January 2003.

b. FINANCIAL STATEMENTS

The bidder should provide financial statements applicable to the firm. If publicly held, the bidder should provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.

If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, should be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm should provide a banking reference.

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The bidder must disclose any and all judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.

The State may elect to use a third party to conduct credit checks as part of the corporate overview evaluation.

Response:

About Celtic:

The following table provides information related to Celtic's identification and Information:

Company Name	Celtic Cross Holdings, Inc dba Celtic Systems
Address of the company's headquarter	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260
Entity Type	Corporation
State of Incorporation	Arizona
Registration Year	2003

Since 2003, Celtic Systems (Celtic) has been a successful developer of enterprise solutions for Motor Vehicle Administrations throughout the United States and Canada. Our core enterprise platform, Celtic Transportation Services Hub (CTS-Hub[™]), along with our flagship motor vehicle product line, has been successfully implemented in multiple jurisdictions on schedule and within budget every time!



Celtic is in its 20th year of business, serving Motor Vehicle Administrations, providing system development, implementation, support services, operations, support, and maintenance.

The founders and senior staff members have decades of relevant Motor Carrier Solutions (including IRP, IFTA, CVIEW, IRP/IFTA Permits, OS/OW Permit and Automated Routing, DMS, OPA, Fuel Tax, Vehicle Registration, Business Licensing, and DL Issuance) experience and have grown organically since inception by adding experienced staff from both the private and public sectors. In addition, Celtic has created a network of advisors drawn from former jurisdictional motor vehicle agency administrators to provide a unique customer/client perspective.

Providing Motor Vehicle agency technology solutions has been the core business of Celtic. We have not only re-engineered and modernized the products and services offered by our company but have also developed a deep understanding and appreciation of the entire business and technical environments of dozens of Motor Vehicle Agencies.

Celtic has successfully implemented our COTS Solution in sixteen States and two Provinces on schedule and within budget. Our solution is operational in all the Jurisdictions as described in the table below:

Customer Name	Details of Work Performed							
	IRP	IFTA	IRP/IFTA Audit	IRP/IFTA Permits	CVIEW	PRISM & CVISN Compliant	DMS	Hosting Option
Montana Department of Transportation	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure Gov. Cloud
Alabama Department of Revenue	✓	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	
Missouri Department of Transportation	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure Gov. Cloud
Florida Highway Safety - Motor Vehicles Department (under construction)	~	✓	\checkmark	\checkmark	✓	\checkmark	✓	
West Virginia Department of Motor Vehicles	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		

Arkansas	\checkmark	\checkmark	\checkmark			\checkmark		
Department of								
Revenue								
Wyoming	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Department of								
Transportation								
Kansas Department	\checkmark		\checkmark			\checkmark		
of Revenue								
Idaho Department	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure
of Transportation								Gov.
								Cloud
District of Columbia	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	
Department of								
Motor Vehicles								
Connecticut	\checkmark		\checkmark			\checkmark	\checkmark	
Department of								
Transportation								
Ohio Department	\checkmark		\checkmark			\checkmark		
of Transportation								
Alberta	\checkmark		\checkmark			N/A	\checkmark	Azure
Transportation								Gov.
								Cloud
Tennessee								

Most current audited annual financial statements

For public information purposes only; not part of contract.

Request for Proposal Number 6721 Z1 Proposal Opening: December 9, 2022

In accordance with Nebraska Revised Statutes §84.712.05(3), the following material(s) has not been included due to it being marked proprietary and/or confidential.

- Celtic Cross Holdings, Inc dba Celtic Systems
 - a. File 1 Financials pages 172-174
 - b. File 1 Resumes pages 188-201

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<u>Confidential</u>: Celtic's financial statements should be treated as confidential information.

c. CHANGE OF OWNERSHIP

If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder should describe the circumstances of such change and indicate when the change will likely occur. Any change of ownership to an awarded bidder(s) will require notification to the State.

Response: Celtic is not anticipating any change in ownership or control of the company during the twelve (12) months following the proposal due date. Celtic shall inform the State is any unforeseen situation arises.

d. OFFICE LOCATION

The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska should be identified.

Response: The MMCIS project implementation will be done from our office in Scottsdale at the following address:

8961 E Bell Road, Suite 101, Scottsdale, AZ 85260

e. **RELATIONSHIPS WITH THE STATE**

The bidder should describe any dealings with the State over the previous five (5) years. If the organization, its predecessor, or any Party named in the bidder's proposal response has contracted with the State, the bidder should identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

Response: Celtic has not done any business with the State of Nebraska in the previous five (5) years, and we don't have any active contract with the State.

f. BIDDER'S EMPLOYEE RELATIONS TO STATE

If any Party named in the bidder's proposal response is or was an employee of the State within the past thirty-six (36) months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a subcontractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

Response: Celtic or its sub-contractors has not hired any employees or consultants that were an employee of any agency of the State of Nebraska.

g. CONTRACT PERFORMANCE

If the bidder or any proposed subcontractor has had a contract terminated for default during the past ten (10) years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's nonperformance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past ten (10) years, including the other Party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past ten (10) years, so declare.

If at any time during the past ten (10) years, the bidder has had a contract terminated for convenience, non-performance, non-allocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting Party.

Response: Celtic or its subcontractors has not done any business with any agency of the State of Nebraska. At any time during the past ten (10) years, Celtic has not been contracted or terminated for convenience, non-performance, non-allocation of funds, or any other reason.

h. SUMMARY OF BIDDER'S CORPORATE EXPERIENCE

The bidder should provide a summary matrix listing the bidder's previous projects similar to this Request for Proposal in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

The bidder should address the following:

- i. Provide narrative descriptions to highlight the similarities between the bidder's experience and this Request for Proposal. These descriptions should include:
 - a) The time period of the project,
 - **b)** The scheduled and actual completion dates,
 - c) The Bidder's responsibilities,
 - d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and
 - e) Each project description should identify whether the work was performed as the prime Bidder or as a Subcontractor. If a bidder performed as the prime Contractor, the description should provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.
- **ii.** Bidder and Subcontractor(s) experience should be listed separately. Narrative descriptions submitted for Subcontractors should be specifically identified as Subcontractor projects.
- **xxix.** If the work was performed as a Subcontractor, the narrative description should identify the same information as requested for the Contractors above. In addition, Subcontractors should identify what share of contract costs, project responsibilities, and time period were performed as a Subcontractor.

Response:

RFP No. 6721 Z1 **MMCIS**

Since 2003, Celtic Systems (Celtic) has been a successful developer of enterprise solutions for Motor Vehicle Administrations throughout the United States and Canada. Our core enterprise platform, Celtic Transportation Services Hub (CTS-Hub[™]), along with our flagship motor vehicle product line, has been successfully implemented in multiple jurisdictions on schedule and within budget every time!



Figure 24 Celtic Transportation Services Hub (CTS-Hub)

Celtic is in its 20th year of business, serving Motor Vehicle Administrations, providing system development, implementation, support services, operations, support, and maintenance.

The founders and senior staff members have decades of relevant Motor Carrier Solutions (including IRP, IFTA, CVIEW, IRP/IFTA Permits, OS/OW Permit and Automated Routing, DMS, OPA, Fuel Tax, Vehicle Registration, Business Licensing, and DL Issuance) experience and have grown organically since inception by adding experienced staff from both the private and public sectors. In addition, Celtic has created a network of advisors drawn from former jurisdictional motor vehicle agency administrators to provide a unique customer/client perspective.

Providing Motor Vehicle agency technology solutions has been the core business of Celtic. We have not only re-engineered and modernized the products and services offered by our company but have also developed a deep understanding and appreciation of the entire business and technical environments of dozens of Motor Vehicle Agencies.

Celtic has successfully implemented our COTS Solution in sixteen States and two Provinces on schedule and within budget. Our solution is operational in all the Jurisdictions as described in the table below:

Customer Name	Details of Work Performed							
	IRP	IFTA	IRP/IFTA	IRP/IFTA	CVIEW	PRISM &	DMS	Hosting
			Audit	Permits		CVISN		Option
						Compliant		
Montana	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure
Department of								Gov.
Transportation								Cloud
Alabama	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Department of								
Revenue								
Missouri	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure
Department of								Gov.
Transportation								Cloud
Florida Highway	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Safety - Motor								
Vehicles								
Department								
(under								
construction)								
West Virginia	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Department of								
Motor Vehicles								
Arkansas	\checkmark	\checkmark	\checkmark			\checkmark		
Department of								
Revenue								
Wyoming	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Department of								
Transportation								

Kansas Department of Revenue	✓	~			√		
Idaho Department of Transportation	~	√	√	√	√	~	Azure Gov. Cloud
District of Columbia Department of Motor Vehicles	√	\checkmark		\checkmark	\checkmark	~	
Connecticut Department of Transportation	\checkmark	\checkmark			\checkmark	~	
Ohio Department of Transportation	\checkmark	\checkmark			\checkmark		
Alberta Transportation	✓	\checkmark			N/A	~	Azure Gov. Cloud
Tennessee							

Celtic is pleased to provide following customer references whose business functions are similar to NE DMS's RFP's requirements and complexities:

- Alabama Department of Revenue
- West Virginia Department of Motor Vehicles
- Kansas Department of Revenue

Reference #1

Client: Alabama Department of Revenue

Project: Motor Carrier Solution

Dates of Service: April 2007 to October 2008 for initial Implementation

Re-modernization/Replacement in April 2018 with ongoing support and maintenance.

Budget: \$5.5 – 7M (including modernization and ongoing support and maintenance for five years)

Services Provided:

Celtic was awarded the Alabama Department of Revenue CMCS Project that included an integrated solution for IRP, IFTA, IRP/IFTA Audit, Trip Permits, CVIEW, Document Management System, and Learning Management System.

The system was implemented as per the project plan and was within the allocated budget.

In 2018, Celtic implemented a new version of the system consisting of modernized UI/UX with major changes to support their infrastructure upgrades.

Celtic continues to support and maintain the integrated solution for Alabama.

Client Contact Name: David Baxley

Client Contact Role in the Project: Manager (Motor Vehicle Division)

Client Contact Phone #: 334-242-9669

Client Contact Email: david.baxley@revenue.alabama.gov

Alternate Contact Name: Trishawn Bell (Business Analyst)

Alternate Contact Phone # 334-242-9621

Alternate Contact Email: trishawn.bell@revenue.alabama.gov

Reference #2

Client: West Virginia Department of Motor Vehicles

Project: West Virginia dmvFirst

Dates of Service: October 2017 – ongoing Support and Maintenance

Budget: \$7 – 7.5M (including modernization, and on-going support and maintenance for five years)

Services Provided:

Celtic implemented its Motor Vehicle Solution (CMVS) solution for the West Virginia project named "dmvFIRST" to replace Driver's Licensing and Title and Registration services at the counter and back-room transaction processing to meet customer needs. As customers request services at the counter, dmvFIRST will access the customer account for detailed customer information and, depending on the type of transaction (T&R new Registration, renewal, D/L renewal, new D/L, etc.), will calculate the fees for services, provide for the collection of those fees, track all transactions, provide a reconciliation process for the cash drawer, and issue the appropriate inventory for Headquarters and 24 field office statewide.

The volume of yearly transactions completed

2.2 million

Work accomplished

Our most recent relevant experience that qualifies Celtic is our implementation of the West Virginia Title and Registration and Driver's License System in 2015. West Virginia had an antiquated system for processing customer facing transactions dating back over 30 years. Celtic implemented their CMVS COTS solution to replace services at the counter to meet customer needs.

The project provided the following functionality:

1. Driver's License	2. Title and Registration
a) Fee Calculation	a). Title # Issuance
b) Payment Collection	b) Plate Issuance
c) Handicap Placard	c) Fee Calculation
	d) Payment Collection
3. Dealer Licensing	4. Dealer License Application
a) Bulk Plate Issuance	a) Fee Calculation
b) Fee Calculation	b) Payment Collection
c) Payment Collection	
5. <u>Inventory</u>	6. <u>Finance</u>
a) Inventory Ordering	a) Cash drawer
b) Inventory Management	b) Payment collection
c) Inventory Issuance	c) Fees distribution
	d) Reconciliation and Daily deposit
7. Hearings and Convictions	
a) Fee Calculation	
b) Payment Collection	
s customers request services at the co	ounter, dmyEIRST calculates the fees for services

As customers request services at the counter, dmvFIRST calculates the fees for services, provides for the collection of those fees, and issues the appropriate inventory for Headquarters and 24 field offices statewide.

In addition, we implemented:

- The COTS IRP and IFTA modules with iLearn for training internal and external users on how to use these modules.
- Our Mobile Driver module for linking applications to smart devices (phones, iPads, tablets) allows external users to perform DMV business without visiting a DMV office, all while going about their normal days' work.
- Our COTS browser-based training system (iLearn) for training field office personnel for driver testing certification and certification renewal courses involving PowerPoint, Textual, video, and sound components.

Client Contact Name: Linda Ellis

Client Contact Role in the Project: Project Manager (currently Deputy Commissioner)

Client Contact Phone #: 304-926-0716

Client Contact Email: linda.k.ellis@wv.gov

Alternate Contact Name: Steve Monroe

Alternate Contact Phone # (304) 352-5948

Alternate Contact Email: steven.e.monroe@wv.gov

Reference #3

Client: Kansas Department of Revenue

Project: Kansas Commercial Vehicles Registration System (KCoVRS)

Dates of Service: January 2014, with ongoing support and maintenance

Budget: \$4 – 4.5M (including modernization, and on-going support and maintenance for five years)

Services Provided:

Celtic implemented a CMVS Intrastate Commercial Vehicle Registration system across 105 counties in Kansas with a Document Management module for the collection of required registration documents. This module forms part of our T&R system COTS product used for regular and commercial motor vehicles. This system processes over 440,000 transactions annually.

Commercial Motor Vehicle registration systems are more complex than regular vehicle registrations due to legislated requirements for compliance, but they have less interfaces, and the volume is relatively low.

High volumes of data and a high number of interfaces require powerful transaction processors and powerful servers supporting a solid Service Oriented Architecture utilizing web services.

We also implemented:

- The Celtic COTS IRP System in 8 field offices and headquarter for internal and external users.
- IRP Titling module.
- The Celtic COTS browser-based training system (iLearn) for training both internal and external users on how to use the system.

Client Contact Name: David Harper

Client Contact Role in the Project: Director

Client Contact Phone #: 785-296-0553

Client Contact Email : <u>david.harper@ks.gov</u>

Alternate Contact Name: Grace Toelkes (CMV Supervisor)

Alternate Contact Phone #: 785-368-6608

Alternate Contact Email: grace.toelkes@ks.gov
i. SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT APPROACH

The bidder should present a detailed description of its proposed approach to the management of the project.

The bidder should identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this Request for Proposal. The names and titles of the team proposed for assignment to the State project should be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person should also be identified.

The bidder should provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the Request for Proposal in addition to assessing the experience of specific individuals.

Resumes should not be longer than three (3) pages. Resumes should include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.

Response: Celtic will leverage Project Management's best practices applicable to the Agile framework. Celtic will onboard a seasoned Project Manager with extensive experience in managing similar projects. The Project Manager will work in collaboration with the NE DMV project manager counterpart from the start of the project through go-live while working with NE

What	Who	Cadence	Outcomes
Portfolio Value Steams Strategic Themes Epic Discovery Budget/Funding	Steering Committee	 Quarterly or as decisions are needed 	 New value targeted Prioritized epics Understanding of MVP Investment decisions
 Program Program backlog Group of 5 sprint teams Architectural runway Simple budgets 	 Project Manager and PMO / RTE Product Management System Architects SME and Leads 	• Program Increment	 Value Achievement Commitment (Current PI) Alignment Release on demand
Team Team backlogs Develop on cadence Stories, spikes, refactoring Traditional sprint teams 	 Development team Scrum master Product owner 	2 week sprints	 Working software – value delivered Code quality Continuous release

DMV in collaboration for tracking and ensuring the quality throughout the project duration and to ensure that the program is delivered on time and within budget. The Project Manager will be supported by the Functional team, Development, and PMO team to ensure the successful execution of the Agile releases.

The below diagram provides a 3-tiered governance view, with stakeholders involved and a focus on outcomes.

The Celtic Project Management framework (based on the Project Management Institute's PMBOK) will be used to plan and execute this program. The framework organizes project management processes into four main phases linked by the results they produce—the result or outcome of one becomes an input to another. It provides for well-defined deliverables, entry and exit criteria, and activity definitions in each of these phases.

The four main phases follow a rigorous structure to plan, execute, control, and close the nine Project Management core processes as depicted in the picture. The Project Management Office (PMO) manages the processes. The four PMO phases are specific to project management and can be applied to any Project Lifecycle model.



A process-centric perspective is provided to the Project Management framework by the nine core processes of Scope, Time, Cost, Quality, Resource, Communication, Risk/Issue, Performance, and Vendor Management.

These core process areas are aligned with the Agile execution framework.

- **Scope Management:** Scope Management ensures that the project includes all the work required to complete it successfully. Key Scope Management activities include:
 - 0 Prioritize Portfolio backlog
 - 0 Split epics, prioritize features
 - 0 Prioritize Product backlog
 - 0 Prioritize team sprint backlog
- **Time Management:** Time Management ensures the timely delivery and completion of the project. Key time management activities include:
 - 0 Fixed Sprints and Program Increment durations
 - 0 Frequent backlog grooming
 - 0 Prioritize user stories
 - 0 Observed team velocity
 - 0 User stories sized based on Agile estimation techniques
 - 0 Team members commit to the sprint backlog
- **Cost Management:** Cost Management ensures that the project is completed within the approved budget. Key cost management activities include:
 - 0 Plan Agile Release Train (ART) Funding
 - o Allocation based on customer demand
 - 0 Determine the Agile Release Train budget
 - 0 Control costs at a Program Increment boundary
- **Quality Management:** Quality Management ensures that the project adheres to the quality standards as planned. Key Quality management activities include:
 - 0 Definition of ready
 - 0 Behavior-driven development (BDD) / Test-driven development (TDD)
 - 0 Continuous integration
 - 0 Definition of Done / Pair testing
- **Resource Management:** Resource Management ensures the most effective utilization of resources for the project. Key Resource management activities include:
 - 0 Evaluate team capacity

- 0 Dedicated teams assigned
- 0 Retrospectives and continuous learning by teams
- 0 Self-organized teams
- Communication Management: Communication Management ensures an ongoing cycle of collecting and disseminating project information. Key Communication management activities include:
 - 0 Setting up a Governance model for the program
 - Identify business owners
 - Align to a common vision
 - Frequent collaboration and team agreements
 - 0 The daily stand-up meeting, sprint demos, and retrospective meetings
 - 0 Publish work status
 - 0 Highly collaborative environment; lean portfolio metrics published regularly
- Risk & Issues Management: Risk & issues Management ensures the identification, analysis, and resolution of project risks and issues. Key Risk & Issue management activities include:
 - 0 Deliver in small increments; mid Program increment reviews
 - 0 Fishbone and 5 Why techniques to analyze impediments
 - 0 Regular Scrum of Scrum meetings to identify impediments
 - 0 Swarm and proactively resolve impediments
- Integration/Performance Management: The Release Train Engineer (RTE) and the PMO team capture agile metrics at period intervals to track the progress of the agile release train. The metrics are captured at sprint, release, and project levels.
 Representative metrics include:
 - 0 Sprint Velocity
 - 0 Sprint Defect density
 - 0 Release Productivity
 - 0 Release defect density

- 0 Release effort variance
- 0 Project Productivity in story points
- 0 Project defect density
- 0 Project schedule variance
- Procurement/Vendor Management: Procurement/Vendor Management ensures the acquisition of services and goods for successful project completion. Key Procurement management activities include:
 - 0 Establish strategic relationships
 - 0 Develop business partnerships
 - 0 Align with Lean and Agile practices
 - 0 Close contracts

The following pertinent skills matrix shows the motor vehicle systems-specific experience that Team Celtic brings to the project. Our staff has been dedicatedly working in the DMV space for over twenty years. The combined experience of the team is over 1000 years.

The individuals listed below with ** are key team members for the implementation project. Resumes of Executive Sponsors and oversight roles are not included.

Team MemberRole and Responsibilities		Backup
Bhaskar Chakravarty	Project Sponsors	Joe McCormick
Samir Nayak	Engagement Manager	Manish Gohil
Manish Gohil **	Single Point of Contact	Sandeep Contractor
Debdas Bhattacharya **	Senior Project Manager	Manish Gohil
Deb Wiley **	Senior Business Architect	Vijay Rajan
Nirav Shah **	Senior Technical System Architect	Murugan Kumaraswamy
Tom Stack **	Senior Database Analyst	Sandeep Contractor
Rajib Chatterjee **	Testing Coordinator	Shweta Chatterjee
Sherri Black **	Training Coordinator	Shweta Chatterjee

For public information purposes only; not part of contract.

Request for Proposal Number 6721 Z1 Proposal Opening: December 9, 2022

In accordance with Nebraska Revised Statutes §84.712.05(3), the following material(s) has not been included due to it being marked proprietary and/or confidential.

- Celtic Cross Holdings, Inc dba Celtic Systems
 - a. File 1 Financials pages 172-174
 - b. File 1 Resumes pages 188-201

4. TECHNICAL APPROACH

The technical approach section of the Technical Proposal should consist of the following subsections:

- a. Understanding of the project requirements,
- b. Proposed development approach,
- c. Technical considerations,
- d. Detailed project work plan; and
- e. Deliverables and due dates.

Response:

<< a. Understanding of the project requirements >>

Celtic has read the RFP thoroughly and understands the requirements specified by the State of Nebraska Department of Motor Vehicles (NE DMV). Celtic has already performed a "fit Gap" analysis between your requirements and our IRP, IFTA, Audit, Permit, CVIEW, and DMS COTS project, Celtic Motor Carrier Solution (CMCS), and while our product is 100% compliant with IRP Plan and IFTA Agreement Out of the Box. We are confident that our solution provides NE DMV with a 75-80% fit as is and the remaining 20-25% fit being achieved through configuration and customization for NE DMV specific requirements.

Celtic endorses and has Agile Methodology for our software development. We have established standard processes to customize and implement our product for our customers. Celtic designs, develops, delivers, and supports products to requirements for the complete life cycle of the product. We will establish and maintain the integrity of work products using configuration identification, control, status accounting, and audits. We will verify the product through Quality Assurance methods separate from the development team to ensure the system performs as per the requirements while validating that the product fulfills its intended use when placed in the production environment.

Celtic Motor Carriers Solution (CMCS) is a web-based, roles-based, totally integrated solution that will deliver the following support to NE DMV:

- Administration of IFTA taxation and permits as required
- IRP registration process and permits as required
- Compliance with PRISM requirements for IRP registration
- IRP and IFTA Clearinghouse processing
- Auditing of these business functions

- CVIEW with offline data and real-time interfaces with PRISM and SAFER services
- Document management system (Option 1) or Interface with ECMS (Option 2)

<<b. Proposed development approach>>

Inclusive: Working with the agency's IT and business groups throughout the program.

One of the first steps in the project will be to meet with the NE DMV project team to validate the requirements, perform a detailed "Fit Gap" analysis and drive out the detailed project plan with all sub-tasks and associated dates. We will derive an understanding of the exact meaning of each requirement, document them, and manage the requirements as the project evolves. A requirements traceability matrix (RTM) will be maintained to create bidirectional traceability among the requirements, project plan, and work products. The RTM will form the baseline for the project scope. Each requirement will be validated in each of the project steps, including Requirements, Design, Construction, Testing, and Implementation. In this way, we will be able to identify any inconsistencies between the project plan, work products, and requirements so that no requirement will fall through the cracks!

After the Requirements Traceability Matrix is finalized, we will work with NE DMV domain experts to go through the integrated COTS solution step by step and screen by screen to document the necessary modifications and configurations to meet the requirements. This document is called the Product Verification Document (PVD). The PVD will provide the design criteria needed for the development team to make the necessary changes to the programs that will result in the NE DMV International Fuel Tax Agreement (IFTA) and International Registration Plan (IRP) along with our COTS CVIEW System and DMS System.

During the RTM and PVD documentation processes, we will be configuring the infrastructure in the hosting environment as required by NE DMV hosted, or an Azure Government Cloud-based hosted environment, including the required hardware and system software, servers, firewalls, internet connectivity, backup/restore capability, disaster recovery capability all in a proposed load balanced and database mirroring set up for redundancy and maximum accessibility to the system. Part of this step is to work with the NE DMV IT experts to document all the required interfaces for access to other system data stores of information as required. During this step, we will create the Interface Control Document (ICD), which will define exactly how we will interface with the external systems.

To minimize the effect external interfaces have on the applications when these applications change, we have developed a Universal Interface Controller (UIC). Our UIC acts as an interpreter between external systems and our core CMCS application. When an external system file format changes resulting in a change to how that system interfaces with our applications, the only thing

that needs to be changed is the UIC, not the application.

After the PVD is finalized and all changes to the COTS product are approved as documented in the PVD, and the hosting environment is ready, code changes and configuration changes are made in conjunction with unit testing, followed by integration testing, system testing, stress testing, User Acceptance Testing, Training and cutover to production.

<u>Show and Tell</u>: Regular, incremental product releases for the extended team to get comfortable with what's coming.

An integral part of our approach is to deploy a "Sandbox" environment with the COTS application to provide an early user experience with respect to the "Look and Feel" of the solution. As the customization takes place, new deployments will be available, and users will be able to access the Sandbox to see the results of their efforts and feedback. This ensures there are no surprises at the time of implementation and is an excellent way to exercise the system early in the project, helping stabilize the programs and validate the converted data and feedback. We will help develop the skills and knowledge of the user community so they can perform their roles effectively and efficiently. We will manage risks by identifying potential problems before they occur so that risk handling activities may be invoked as needed across the life of the project to mitigate adverse impacts on achieving project goals.

<u>Compliant</u>: Our products are running compliant processes in multiple jurisdictions; it comes Out of The Box!

The Celtic Solution is totally compliant with the IRP & IFTA plans, including Audit features, IRP Data Repository Modernization, and is fully PRISM compliant. We will work with NE DMV to ensure our customized solution is compliant with NE DMV Administrative Rules and department business rules for motor carrier registrants.

<u>Proven Methodology</u>: Evolved over the years and matured with every installation, our methodology has IRP, IFTA, and Audit specific interventions and tweaks.

We have anticipated the complexities associated with undertaking this project and have already built a skeletal work plan with the associated tasks required to make a smooth transition to the new and exciting CMCS Solution for the NE DMV.

The Celtic Team will follow our proven Agile Methodology, combined with our internal processes and procedures, to complete this project on time and within the budget, as it has been done for 18 jurisdictions. Celtic's development methodology is designed to provide efficient and timely program development while ensuring the highest quality and accuracy. Our development process has evolved, taking into consideration the best practices of Software Engineering and combining them with the following standard industry business practices:

- Establish Detailed Project Plan Each project activity will be defined using the Microsoft Project tracking tool, and a top-level work breakdown structure (WBS) will provide the baseline for measuring project progress and will be used for project status reporting to show adherence with the schedule clearly.
- Establish Configuration Management for Project Products
- Create and document the Requirement Traceability Matrix (RTM)
- Create the Product Verification Document (PVD) Specifications
- Create and document the technical Interface Control Document (ICD)
- Define the Data Conversion Plan (with multiple trial conversions and data cleanup reports)
- Develop Testing Plans (System, Integration, and User Acceptance)
- Code and Unit Test with Prototype Presentations (using a "Sandbox")
- Perform Integration Testing
- Perform System Testing
- Perform Stress Testing
- Perform Regression Testing as required
- Develop User Manuals, Training Plans, and materials
- Develop detailed Cutover plans
- Deliver Train the Trainer for leads
- Assist with User Acceptance Testing
- Deliver User Training
- Perform Final Conversion run and verification
- Implementation into Production
- Post Implementation Review
- Operations, Maintenance Support, and Enhancements

One area we believe will be able to add value to our proposed project plan is the data conversion

from existing database structures to a true "Common Client" database structure between IRP, IFTA, and IFTA Audit. One of the most important steps in converting any database of information is to get to know the data you are converting. Celtic will work closely with NE DMV to ensure the data is as free from inconsistencies as possible. We will run reports to identify inconsistencies in the existing data for NE DMV subject matter experts to review and resolve either by manual intervention or via some automated program correction. Our resources have converted IRP, IFTA, and IFTA Audit databases from State grown VSAM file structures and relational database stores to DB2, SQL Server and Oracle.

Once the Common Client database structures are in place, the new system will make for a much more efficient and effective database management platform.

Celtic resources have successfully converted IRP, IFTA, and IFTA Audit databases for multiple jurisdictions in the past.

Goals and Objectives

Celtic's goals and objectives for the NE DMV System Modernization are to provide NE DMV with an integrated IRP, IFTA, and Audit solution that takes maximum advantage of new technologies to improve customer service and ensure compliance with business processing requirements.

Our COTS browser-based solution is designed by our experienced computer system technicians and architects together with Celtic solution business area experts and with input from real-world Motor Carrier Business Area Experts from multiple jurisdictions over a period of 16 years. Celtic will customize and configure our customer-centric and integrated solution for the State that will meet and exceed NE DMV expectations. Our solution utilizes the latest proven technologies and techniques to include lessons learned from our extensive experience over multiple implementations in the Motor Carrier Services Field. We will employ the most recent and proven platform-independent tools within the constraints of the State to accomplish the maximum benefit to the State.

Why Celtic?

Celtic products have been installed and currently running in *18 jurisdictions in North America for over the past 16 years*.

Celtic has deployed Motor Carrier solutions over the past three years with key capabilities to eight (8) jurisdictions. In 2019 we implemented our solution in three jurisdictions: the Ohio Department of Transportation, the Idaho Department of Transportation, and Alberta Transportation (Canada). **All were delivered on time and within budget!**

Celtic resources have worked with the Motor Carrier/Trucking organizations, and federal

organizations, like the FMCSA and the IRP and AAMVA Organizations, for over 25 years. We understand registration, licensing, permitting, and tax return tracking and collection of returns. We understand the need for efficient transaction processing to afford the carriers more time on the job and less time in wait lines trying to get their authority to operate. Today's technology presents an unmatched opportunity to provide carriers with streamlined operations and processes that can minimize their operating costs.

Perhaps the single biggest testament to Celtic's capabilities in the Motor Carrier area comes from the selection of Celtic to provide the hosting and ongoing support and maintenance of the IRP Clearinghouse administered by IRP, Inc. The project was deployed in the year 2012 and went in seamlessly. As you know, the IRP Clearinghouse administers to all the US and Canadian jurisdictions and operates internationally. This gives us the confidence that Celtic has the experience and the technology to meet the NE DMV challenge for a new and efficient system.

<<c. Technical considerations>>

Modular: To granular details. It speeds up implementation and accelerates enhancements/ fixes.

Celtic uses a framework (i.FRAME.wrk) for their motor vehicles and motor carrier solutions. This framework uses the latest technology and the most flexible/scalable Service Oriented Architecture (SOA). Celtic has developed the following sharable assets:

- Common Customer module (supports both business and individual customers).
- Inventory module
- Cash drawer module
- Cart Management for payment
- Financial module
- Correspondence module for template management and correspondence tracking

<u>Open Architecture</u>: Easier to upgrade/ maintain, easier to remain at the cutting edge of technology.

<u>Enhanced UX</u>: Designed with keeping the user in mind. Easy to navigate, easy to learn – improves productivity.

<u>Rule-Based</u>: Business logic is externalized from code and is stored in Rule Engine and Database Tables. Makes it easy to configure with minimal or no code changes at all.

Our optional browser-based Training module (iLearn) provides training, testing, and analysis of

the result with automatic prescriptive recommendations. Administrators can create new courses, manage them and monitor the progress of the trainees. This module supports training on the application rules and can be integrated for training and testing on the use of the application programs.

- The CMCS solution is Customer Centric and provides a 360° view of the customer
- Role-based authorization
- A true browser-based environment supporting different self-service approaches
 - External users can use the same web screens used by internal users but are restricted to only those authorized functions associated with their user ID/Role
 - External users who do not have access to a computer can use "web apps" on their smart devices to perform the transaction
- Point of sale scanning, indexing, and storage for future retrieval
- Ad-hoc reporting capability
- Ensures AAA+ support by providing different options
 - 0 Online/context-sensitive help
 - Browser-based incident-tracking system to allow reporting of issues right from the source. The system automatically generates e-mail notifications to support staff as required, and authorized persons can track the status of all issues

In summary, we believe we have the knowledge, experience, resources, proven mature methodology, framework, platform, architecture, and integrated applications to provide Nebraska with a flagship system the State will be able to build on for many years.

<<d. Detailed project work plan>>

Celtic has reviewed the implementation roadmap of NE DMV and agrees with their overall approach. The implementation and data migration timeline of 12 months for the MMCIS can be achieved only by using a CMCS COTS product.

Our Proposed Implementation solution overview is given below:

- A. We will use our proven COTS solution CMCS (Celtic Motor Carrier System) which will provide most functionalities out of the box and require significantly less effort in configuration and customization when compared to a custom development effort.
- B. Our solution will drive operational efficiencies through workflows, configurable rules, and integration with other internal applications.

- C. Easier maintenance of the solution using a modular design approach.
- D. Reduced implementation effort leveraging our prior knowledge and experience in implementing motor carrier solutions in other USA and Canada jurisdictions.
- E. Agile development methodology to build the solution incrementally. The functionalities configured/customized will be available to NE DMV business users earlier to provide quicker feedback.
- F. Implement the solution in 12 months with a single deployment.
- G. The legacy system proposed to be de-commissioned in two months after Go-live.
- H. Use current NE DMV on-premises product licenses to reduce costs
- I. Warranty support of 18 months after Go-live

Given below is an indicative project plan with key milestones. Celtic will work with NE DMV to finalize our detailed project plan:



Figure 25 Implementation timeline with key milestones

<<e. Deliverables and due dates>>

Following is our proposed schedule for the deliverables. Celtic will work with the NE DMV project manager to finalize the deliverable schedule:

No.	Deliverable Name	Anticipated
		Submission/Due Date
1	Project Management Plan (PMP)	April 17, 2023
2	Integrated Master Schedule	May 1, 2023
3	Final Implementation Plan	May 1, 2023
4	Requirements Traceability Verification Matrix	May 1, 2023
5	Solution Security Plan	June 1, 2023
6	COTS System Technical Architecture Design	June 1, 2023
7	Interface Control Document – NE DMV Integration	July 3, 2023

8	Interface Control Document - External Systems	July 3, 2023
9	Product Verification Document for Enterprise System	July 17, 2023
10	Product Verification Document for IFTA & Tax System	July 17, 2023
11	Product Verification Document for IRP System	July 17, 2023
12	Product Verification Document for IRP & IFTA Audit System	July 17, 2023
13	Data Migration and Data Conversion Plan	June 1, 2023
14	Initial Legacy Data Mapping to COTS	June 1, 2023
15	Development Completion Software Milestone	November 1, 2023
16	Configuration Completion Software Milestone	November 1, 2023
17	Final Legacy Data Mapping to COTS	June 23, 2023
18	Security Testing Plan	October 2, 2023
19	Key Performance Measures Criteria Report	December 11, 2023
20	Security Verification	December 11, 2023
21	UAT Completion Report	January 5, 2024
22	Training and Training Materials	January 15, 2024
23	Final System and User Documentation	February 14, 2024
24	Deployment Implementation Plan and Checklist	February 14, 2024
25	Final Solution	March 1, 2024
26	Project Closeout & Lesson Learn	March 25, 2024
27	Operations and Maintenance (O&M) Plan	January 5, 2024
28	Warranty Completion Report	September 1, 2025
29	Knowledge Transfer & Turnover Plan	January 5, 2024
30	Project Closure Report	March 25, 2024

Form A Bidder Proposal Point of Contact

Request for Proposal Number 6721 Z1

Form A should be completed and submitted with each response to this Request for Proposal. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information						
Bidder Name:	Celtic Cross Holdings, Inc dba Celtic Systems					
Bidder Address:	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260					
Contact Person & Title:	Sandeep Contractor (Senior Program Manager)					
E-mail Address:	contact@celtic.bz, sandeep.contractor@celtic.bz					
Telephone Number (Office):	623-552-3020					
Telephone Number (Cellular):	630-788-9007					
Fax Number:	480-991-4200					

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information						
Bidder Name:	Celtic Cross Holdings, Inc dba Celtic Systems					
Bidder Address:	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260					
Contact Person & Title:	Sandeep Contractor (Senior Program Manager)					
E-mail Address:	contact@celtic.bz, sandeep.contractor@celtic.bz					
Telephone Number (Office):	623-552-3020					
Telephone Number (Cellular):	630-788-9007					
Fax Number:	480-991-4200					

Ceitic Systems REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICE FORM

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this Request for Proposal and agrees to the terms and conditions unless otherwise indicated in writing and certifies that contractor maintains a drug free workplace.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this Request for Proposal.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (OR VIA DOCUSIGN)

FIRM:	Celtic Cross Holdings, Inc. dba Celtic Systems
COMPLETE ADDRESS:	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260
TELEPHONE NUMBER:	623-552-3020
FAX NUMBER:	480-991-4200
DATE:	12/12/2022
SIGNATURE:	Haverent
TYPED NAME & TITLE OF SIGNER:	Bhaskar Chakravarty (CEO)

Appendix A: Option 1 - MMCIS Modernization Requirement Traceability Matrix, Request for Proposal 6721 Z1

Instructions/Descriptions of Requirements Columns:

Bidders must complete all eight tables (Single Customer, IFTA, IRP, Account & Payment Processing, Collections, Audit, Permits, ITD, Technical, Reporting, and Interfaces) in Appendix A. Bidder must place company name at the top of the first table where indicated.

<u>Requirement #</u>: This column contains the alpha-numeric number assigned to each requirement. Protected to restrict bidders from making changes.

<u>Requirement Description</u>: This column contains a description of the requirement. Protected to restrict bidders from making changes.

<u>Current Environment:</u> This column states whether the requirement addresses a currently existing business or technical function of the Nebraska Department of Motor Vehicles (NE DMV) or one that doesn't exist. Protected to restrict bidders from making changes.

- Yes: Full or partial functionality exists in the current system.
- No: Does not exist in current system.
- In the Interface Catalog table, "Exists" or "Does Not Exist" replaces "Yes" or "No".

<u>Delivery Method</u> (all tables except Interface Catalog [INT]): Bidders shall select the appropriate response from the drop-down menu provided (1, 2, 3, 4). Complete the Delivery Method column with one of the following responses:

- 4 Base Product: Feature/Function is included in the proposed solution and available standard or "out of the box" and in the current software release.
- 3 Custom: Feature/Function can be provided in some way. "Other" includes custom modifications, third party software, or another method.
- 2 Future Release: Feature/Function will be available in the future or in a future release. Provide anticipated delivery date, version, and service release in the Explanation column.
- 1 Not Proposed: Feature Function has not been proposed by the Bidders. Provide brief description of why this functionality is not proposed in the Explanation column.

<u>Explanation (all tables except Interface Catalog [INT])</u>: For all Delivery Method responses, Bidders must provide a brief explanation of how the proposed system meets this requirement. Free form text can be entered into this column. Bidders must ensure all information appears when printing Appendix A for submission.

<u>Proposed Solution</u> (Interface Catalog [INT] table only): Provide a narrative description of the technology used to construct the interface/data share/file share. Free form text can be entered into this column. Bidders must ensure all information appears when printing Appendix A for submission.

<u>Description</u> (Interface Catalog [INT] table only): Provide any additional narrative necessary to explain how the interface is constructed and a brief explanation of how the proposed system meets this requirement. Free form text can be entered into this column. Bidders must ensure all information appears if printing Appendix A for submission.

<u>Identify Source</u> (Interface Catalog [INT] table only): Identify the source (production or replicated database) for each interface. Free form text can be entered into this column. Bidder must ensure all information appears when printing Appendix A for submission.

Bidder Name	r Celtic Cross Holdings, Inc., dba Celtic Systems a							
Requirements Traceability Matrix for Option 1: (MMCIS Including a Document Management System) Single Customer (SC)								
	Requirements				Bidder Response Section			
REQ#	Requirement Description	Current Env.	Vendor or Sub.	Delivery Method	Explanation			
SC.1	General							
SC.1.1	System shall provide a solution which is fully compliant with the International Registration Plan, IRP Data Repository, International Fuel Tax Agreement, IFTA Clearinghouse, PRISM, and CVISN/ITD requirements including any changes through ballot or federal requirement.	Yes	Vendor	4-Base Product	Celtic Systems is a product company focused on Motor Carrier and Motor Vehicle space with a full product suite to address all functions of the agency. Celtic's Commercial M Carrier Solution ("CMCS") COTS Products for IRP, IFTA, Permits, DMS, and CVIEW that comply with IRP & IFTA plans, IRP Data Repository (IDR), IFTA Clearinghouse, an PRISM/ITD requirements. Our IRP and IFTA systems are updated with the most rece changes through the ballot, and CVIEW has the most curr version of the CVISN/ITD and PRISM architecture defined FMCSA.	o Aotor nd ent rent I by		
SC.1.2	System shall provide automated collection, storage, and reporting of comprehensive customer information, transaction activity, audits, and statistics related to all IRP/IFTA activity.	Yes	Vendor	4-Base Product	CMCS solution architecture is based on a common custon Each customer is assigned a common customer number to can be used as the customer's IRP and IFTA account num IRP and IFTA can share common carrier information such USDOT, a Tax ID (TIN), and customer legal and DBA nam When a common customer is created, the PRISM/CVIEW	ner. hat nber. as nes.		

TIN, to obtain and/or validate the information. The system collects and consolidates complete details of the customer and tracks this information in the Customer 360° view. The Customer 360° view information includes the following items and can be expanded to add more information as required: Customer personal information, including name, address, and contact information Vehicles registered to the customer Notes related to the customer • Requests submitted by the customer Customer's financial transaction history • Actions that can be executed by the user/customer on the customer record Assets owned by the customer, including their • registration plates, vehicles, insurance information, and credentials Alerts based on triggers such as unpaid transactions or based on upcoming events such as a renewal date Any change in customer data will be reflected throughout the system. All changes made to a customer 360° record are logged for future auditing. CMCS captures audit trail events in the user activity table for viewing and reporting the important activities done by the user after logging in. CMCS provides real-time responses for specific timeframes from various reports and inquiries for data analysis, such as: Financial Reports • Inventory Reports User Activity Reports IRP Transaction Reports

information will be queried, based on the USDOT number or

					IFTA Transaction Reports
SC.1.3	System shall provide ongoing monitoring of IRP and IFTA jurisdiction fee and tax changes including development, testing, delivery, and installation of system modifications required for NE DMV to maintain compliance with changes, upon NE DMV approval.	No	Vendor	4-Base Product	 IRP/IFTA Jurisdiction fee and tax changes As a part of our support and maintenance service, Celtic implements jurisdictional fee and tax changes and/or calculation rules within 120 days of the memo date as posted on IRP, Inc. or IFTA and as required by the plans Notification of jurisdictional fee/tax changes will be reported by authorized NE DMV users via Celtic's Incidents Tracking System. These changes are also reported by IRP and IFTA. Celtic will update the status of the reported issue and provide notification of changes to NE DMV through release notes. System Modifications/Change Requests To effectively control and manage changes to the system, Celtic proposes to set up a Change Control Board (CCB) with NE DMV and Celtic Personnel to analyze and approve required system changes. Any change to the baselined requirement will need to go through a Change Request (CR) process. The Change Request Form will be submitted by NE DMV PM to Celtic PM. Celtic will analyze the change and provide a solution along with the estimates. The CR form with the Celtic response(s) will be shared with the NE DMV PM. Change Requests will be tabled in the CCB meeting for discussion. Upon approval of the CR, the process for implementing the change will be initiated.
SC.1.4	System shall comply with the IRP, IFTA and the State of Nebraska requirements for data retention (whichever timeframe is greater) for the specified number of years required, plus the current year, with the ability to query the data.	Yes	Vendor	4-Base Product	CMCS provides a document and data purge batch process. During the requirement gathering sessions, Celtic will work with NE DMV to understand and document NE DMV's document and data retention policies.

					The system purge process will be configured for a number of years to accommodate NE DMV's document and data retention requirements.
SC.1.5	System shall display a program level status (cancelled, active, revoked, suspended) and provide information to all users regarding remedy. Certain statuses will disallow processing.	Yes	Vendor	4-Base Product	CMCS allows authorized users to update the status of the customer information at various levels within the system (Common Customer Account, IRP account, IFTA account, and CVIEW). The status can be timebound and/or user-managed. The system will provide a hard stop message, warning message, or an information-based message as determined by business rules associated with the various statuses.
					for example, the Cash Only flag and the Certified Fund's "last date" allow authorized NE DMV users to prevent the carrier from paying with specific payment types for a specific period after receipt of an NSF.
SC.1.6	System shall provide customer/program level flags which include the date flagged and the date cleared. (e.g., bad check flag, no-interstate activity flag, bankruptcy flag, administrative hold flag [could be set for various reason and shall include a comment/note section]). Certain customer activity shall be disallowed (based on NE DMV business rules) until flag is cleared.	Yes	Vendor	4-Base Product	CMCS allows authorized users to update the status of the customer information at various levels within the system (Common Customer Account, IRP account, IFTA account, and CVIEW). The status can be timebound and/or user-managed. The system will provide a hard stop message, warning message, or an information-based message as determined by business rules associated with the various statuses. For example – If an audit supplement is not paid, the status of the account is updated with "Audit Hold". Open supplements cannot be paid if the account is on Hold. These statuses are driven by business rules.
SC.1.7	System shall provide an NSF payment and online payment failure process to reverse a payment and the ability to receipt the replacement payment, including the option to waive or receipt a "returned check fee."	Yes	Vendor	4-Base Product	CMCS provides a Miscellaneous Fees module to process NSF payments or waive or receipt a "returned check fee". The system includes functionality such as Same Day and Next Day Payment Cancellation to reverse a payment.
SC.1.8	System shall allow an authorized NE DMV User to clear the requirement for certified funds.	Yes	Vendor	4-Base Product	CMCS provides authorized users the ability to clear the requirement for certified funds.

SC.1.9	 System shall provide a range of correspondence management and processing capabilities including: Provide a secure electronic method to send and receive correspondence to/from the customer, including electronic certified mail. Provide a secure electronic method to attach documentation to the correspondence both inbound and outbound. Automatically capture and store communication details such as method of communication, address, date, and time for both correspondence and notifications. Provide automatic acknowledgement that the communication was sent and/or received. Provide barcode printing on credentials and correspondence. Enable an authorized user to revise and customize (edit) system generated correspondence. Provide an option to review the correspondence on the screen within the customer account prior to being sent. Enable an authorized NE DMV User to cancel or delete a system generated letter. 	No	Vendor	4-Base Product	 CMCS includes a correspondence module that can create and modify templates used for communication, including email, letters, notifications, text messages, and reports. Users can request notifications electronically for specific events, such as renewals, suspensions, reinstatements, and System Notifications. CMCS communication uses SSL (secured channel) to ensure secure data communication while in motion. The CMCS customer web portal allows secure communication and document sharing between motor carriers, service providers, and authorized DMV users. The system allows DMV users to review messages and documents from external users and update the status to in-review, approved, or rejected. Approved documents are automatically indexed and linked with associated transactions. All correspondence is stored in the database or secured storage. Correspondence can always be regenerated using the reprint option. CMCS supports multiple correspondence delivery methods, such as local and bulk printing for mail, email, and notifications, registration renewals, and cab cards for large fleets. Documents, including cab cards and IFTA licenses, are barcoded per the plan requirements. During the requirement gathering sessions, Celtic will document and customize the system to barcode required communications.

					The system allows authorized users to modify ongoing transactions, amend the transaction, and cancel the transaction.
SC.1.10	System shall provide an option for MC Customers to receive correspondence by e-mail in lieu of mail. This option must allow MC Customers to select individual delivery methods for IFTA and IRP. For instance, sending IFTA correspondence via mail and IRP correspondence via e-mail. Please note that some correspondence must be sent by mail due to legal requirements.	No	Vendor	4-Base Product	CMCS provides users with the ability to select the preferred method of receiving correspondence via mail or e-mail. The system will comply with legal requirements to mandate correspondence delivery via mail.
SC.1.11	System shall provide the ability for system generated correspondence that include MC Customer address and other relevant data. Correspondence shall be sent via email or printed to an NE DMV printer and mailed based on MC Customer preference.	Yes	Vendor	4-Base Product	CMCS includes the ability to capture the customer address, legal name, dba name, and other relevant details and print it on the correspondence as necessary. Such correspondence can be sent via mail, email, or printed to a printer based on customer preferences.
SC.1.12	System shall provide for the creation of outbound electronic forms, combining data from the production MCS database	No	Vendor	3- Custom	CMCS correspondence module allows authorized DMV users to create and manage electronic forms integrated with the CMCS database and image repository.
	image, etc.).				During the requirement gathering sessions, Celtic will document NE DMV specific configuration or customization to the system.
SC.1.13	System shall provide the ability to capture a signature via electronic	No	Vendor	3- Custom	Celtic has experience interfacing our system with electronic devices, including signature pads.
	device and assign the signature image to a specific document.				CMCS solution will be modified to interface with NE DMV's device to capture signature images to a specific document.
SC.1.14	System shall provide the ability to correct errors on records and maintain a log of all changed records.	Yes	Vendor	4-Base Product	CMCS solution provides the ability to correct errors on records through amending supplements and error correction

					supplements. The system allows for correcting distance or vehicle information on a supplement.
					The User Activity logging and reporting provide information on users and transactions performed and tracks special activities such as canceled/voided payments and administrative overrides.
SC.1.15	System shall provide an auto-complete feature for all available data entry fields (i.e., entering a zip code populates the city and state.)	No	Vendor	4-Base Product	CMCS solution provides the ability to auto-populate data in certain fields. For example, entering the initial numbers of a zip code displays a list of matching zip codes. The user can select the preferred zip code from that list to populate the zip code, city, state, and other fields on the screen.
SC.1.16	System shall provide an alert to users entering a FEIN, SSN, or USDOT number that already exists within the database.	Yes	Vendor	4-Base Product	CMCS solution provides an error or warning message (based on requirement) if the entered FEIN, SSN, or USDOT is already registered in the system.
SC.1.17	System shall display a lock message when a record is being manipulated, indicating the user currently editing the record.	No	Vendor	4-Base Product	CMCS solution restricts multiple users from updating a record simultaneously.
					CMCS transaction flows displays a hard stop message based on the transaction workflow status, transaction status, and record being edited.
					During the requirement gathering sessions, Celtic will demo our current functionality. The system will be configured to display NE DMV's lock message.
SC.1.18	The system shall permit another user to view, but not make changes to a record which is in use by another user (locked).	Yes	Vendor	4-Base Product	CMCS solution restricts multiple users from updating a record simultaneously. Users can use the inquiry functionality to view details pertinent to that record. Only authorized users can override the lock and access the record.
SC.1.19	System shall provide a link to the location in Google Maps whenever an MC Customer address is displayed to	No	Vendor	3- Custom	During the requirement gathering sessions, Celtic will discuss and document this requirement.

	NE DMV Users. This functionality is not required, but desired.				CMCS solution will be modified to provide a link to the location in Google Maps whenever a customer address is displayed to the users.
SC.1.20	System shall provide the ability to store the FEIN (at the customer level) and SSN (at the owner/officer level).	Yes	Vendor	4-Base Product	CMCS solution allows capturing and storage of FEIN at the customer level and SSN at the owner/officer level as required.
SC.1.21	System shall interface with the states' E1 accounting system for the purpose of enrolling applicants for ACH refunds and requesting address book (AB) numbers.	No	Vendor	3- Custom	Celtic has extensive experience interfacing the CMCS with the state's financial/ accounting systems. Celtic will modify the CMCS to interface with the E1 accounting system.
SC.1.22	Vendor must integrate the payment component of all web transactions with NIC Nebraska, including at least IRP payments, IFTA tax and credential payments, sales tax payments, audit payments, and trip and fuel permit payments.	Yes	Vendor	3- Custom	Celtic has extensive experience interfacing the Celtic payment processing module with state provided payment services, including interactive services in multiple jurisdictions. Celtic will configure the CMCS payment collection module to interface with NIC Nebraska.
SC.1.23	System shall maintain historical account numbers, FEIN, and SSN by NE DMV issued "carrier numbers."	No	Vendor	4-Base Product	Each customer in the CMCS solution is assigned a unique carrier number. The structure of the carrier number will be based on the client's requirements. The system captures the updated information as well as maintains history tables that log the historical information.
SC.1.24	System shall capture real time and historical information that can be searched and viewed by all NE DMV Users.	Yes	Vendor	4-Base Product	CMCS captures all information in real-time, and for important information, it captures the updated information as well as maintains history tables that log the historical information. Based on the information, various reports/inquiries can be generated for authorized users. CMCS captures audit trail events in the user activity table for
					viewing and reporting the important activities done by the user after logging in.

SC.1.25	System shall provide the ability for NE DMV to broadcast messages to MC Customers.	No	Vendor	4-Base Product	CMCS solution provides an Alerts and Notification module that allows authorized users to create and broadcast messages to the customers.Once an alert is broadcasted, the message is displayed on the customer's dashboard upon logging into the system. Users can set an effective and expiration date for the message to be broadcasted.
SC.1.26	System shall display W-9, POA, and NE DMV Record Keeping Form flags at the dashboard level, with a link to documents on the dashboard.	No	Vendor	4-Base Product	CMCS provides the link to download external forms or navigate to the external link. The CMCS will be configured to link the W-9, POA, and NE DMV Record Keeping forms.
SC.1.27	System shall have one single customer account with all demographic data including: FEIN, SSN, Name, DBA name, physical address (must be in NE and validated with USPS), fuel type, mailing address, owners/officers, phone numbers, email address, reporting service, carrier type, DOT number, etc.	Yes	Vendor	4-Base Product	CMCS solution captures and stores all demographic details related to a customer in a single account. The system prohibits using the existing customer information to create another customer account in to the system.
SC.1.28	System shall allow the creation of an MC Customer account with a pending TIN, or with a pending TIN for the owner or an officer.	Yes	Vendor	4-Base Product	CMCS solution provides the ability to create a customer account without the USDOT or TIN.
SC.1.29	System shall provide hard edits (edits that cannot be bypassed) and warnings (edits that can be overridden) that are unique messages which clearly define the error in data entered. These messages must display directly to the end user (NE DMV User or MC Customer), such as PRISM and vehicle level stops, customer level stops, and IRP or IFTA specific stops.	Yes	Vendor	4-Base Product	CMCS provides codified hard edits, soft edits with an override, a warning message, and informative messages throughout the system. Messages will be associated with NE DMV's business rules and other validations that help customer support to identify the related business rule when the authorized users (internal or external) receive an error message.
SC.1.30	System shall create a data base of reporting services that can be tied to multiple carriers. Reporting services will have to request an online account and	Yes	Vendor	4-Base Product	CMCS solution has the ability to create an account for reporting services/service providers, that will be associated with multiple carriers. The reporting services must process an application for account creation via the Self-Registration

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	must be approved by NE DMV prior to activation.				module which is then reviewed and approved by an authorized DMV user.
SC.1.31	System shall allow reporting services to search for their customers using various means (e.g., name, NE carrier number, etc.).	No	Vendor	4-Base Product	CMCS solution provides the ability for reporting services to search for their customers using various search parameters such as the designated carrier number, name, TIN, etc.
SC.1.32	System shall allow reporting services, and MC Customers (once authorized by NE DMV) to have access to multiple accounts at the program level when authorized.	Yes	Vendor	4-Base Product	Once the reporting service/service provider account is authorized, the CMCS solution allows authorized users to assign multiple carrier accounts at the fleet level to their carrier accounts.
SC.1.33	System shall provide the ability to manage inventories (plates and decals) for credentials issued by NE DMV and authorized carriers.	Yes	Vendor	4-Base Product	CMCS solution provides an Inventory module that allows authorized users to add and manage inventory (including plates and decals) to issue credentials.
SC.1.34	System shall capture and store the State in which the MC Customer is registered for IFTA or IRP, if not Nebraska.	No	Vendor	4-Base Product	CMCS solution captures and stores information if a customer is registered in a State other than the base jurisdiction for IFTA and IRP.
SC.1.35	System shall provide an alert method to both the MC Customers and designated NE DMV User when an MC Customer attempts to close an IRP account with an active IFTA account, or when an MC Customer attempts to close an IFTA account with an active IRP account.	No	Vendor	4-Base Product	CMCS provides an alert warning message while attempting to close an IRP account with an active IFTA account. The system will be customized to provide an alert while attempting to close an IFTA account with an active IRP account.
SC.1.36	System shall provide a bankruptcy flag at the customer level. Payments can be	No	Vendor	4-Base Product	CMCS solution provides the ability to enable or disable the bankruptcy flag at the customer level. Once the flag is

	accepted while records are in bankruptcy status.				enabled, the customer is prohibited from processing any transactions except for outstanding payments.
SC.1.37	System shall allow all NE DMV Users to view all gathered documents.	No	Vendor	4-Base Product	CMCS solution assigns a unique number to each document that is collected. Users can click the document number to view the selected document which opens in the document management system.
SC.1.38	System shall allow NE DMV Users to cancel IRP fleet(s) and/or IFTA accounts based on NE DMV business rules.	Yes	Vendor	4-Base Product	CMCS solution has to ability to set the status for the IRP fleet(s) and/or IFTA accounts as Cancel or back out the transaction processing for IRP fleet(s) and/or IFTA accounts.
SC.1.39	System shall allow MC Customers to close an IRP and/or IFTA account that satisfies established criteria after NE DMV approval.	No	Vendor	4-Base Product	CMCS solution allows the customer to set the status for their IRP and/or IFTA account as Closed upon satisfying the required criteria based on the client's requirement.
SC.1.40	System shall provide the ability for all users to initiate demographic changes. Some changes will require NE DMV approval.	No	Vendor	4-Base Product	CMCS solution provides the ability for all users to perform some demographic changes. Users must have to perform certain supplements to reflect the changes, for Example: Change Fleet Supplement.
SC.1.41	System shall provide search, filter, and export capabilities for MC Customer account information, including, but not limited to: • Zip code • Outstanding documents • Suspended MC Customer accounts • Bankrupt MC Customer accounts • Appeal level supplements and audits	No	Vendor	4-Base Product	CMCS solution provides search, filter, and export capabilities for customer account information. The Inquiry module allows users to search and view customer information and export the customer information via print or email.

	Users can view and upda vehicle and supplement I module.	te outstanding evels using the	g documents at the e Document Collection
	Document Collection		Vehicle Documents
	Supplement Search		
	*Account No. *Fleet No.	*Reet Expiration Year	Reet Expiration Month
	Supplement No. Unit No.	VIN	Place No.
	Outstanding Documents Only Outstanding Vehicle Documents Only		$\mathcal{O}(0) \qquad \mathcal{O}(0)$
	export of suspended or b level supplements, and a	eports that su ankrupt custor udit informatio	pport the filtration and mer accounts, appeal- n.
	Reports	•	Ad Hoc
	Table Schema Information O In 50%, for coll-tables use the schema "MASED_MODOT_CE, PL_sodebables" and for transaction table use the schema "MA	KED_MODOT_CEL_R1_application*.	
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SINGLE CUSTOMER COMPLETE

	Requirement Traceability Matrix for Option 1: (MMCIS Including a Document Management System) International Fuel Tax Agreement - IFTA (IF)										
Requirements			Bidder Response Section								
REQ#	Requirement Description	Current Env.	Vendor Delivery or Sub Method Explanation								
IF.1	General										
IF.1.1	System shall comply fully with the International Fuel Tax Agreement (IFTA), All NE law, NE state agency rules and	Yes	Vendor	3- Custom	CMCS IFTA is fully compliant with IFTA Inc. and will be modified to comply with the NE state agency rules and regulations and NE DMV business rules in the licensing and						

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	regulations, and NE DMV business rules in the licensing and processing of quarterly fuel tax returns for Nebraska-based carriers.				processing of quarterly fuel tax returns for Nebraska-based carriers.
IF.1.2	System shall interface with IFTA, Inc. for downloading quarterly fuel tax rates, surcharges, and fuel types, and have the capacity to split rates for jurisdictions.	No	Vendor	4-Base Product	CMCS IFTA provides a user interface to upload the tax rate matrix from the IFTA Inc. website. The XML version file is being downloaded manually from IFTA Inc.
IF.1.3	System shall provide a browser-based solution that includes software components necessary to provide the IFTA services as described in this document.	No	Vendor	4-Base Product	CMCS is a browser-based application that allows authorized users to access the application through a secure web or internet interface and comprises all the necessary components to provide IFTA services as outlined in the requirements.
IF.1.4	System shall provide an automated purge of data from the oldest quarter every year as the IFTA retention period concludes per records management policy and NE DMV business rules. (For example, carriers which are suspended should not be purged.)	No	Vendor	4-Base Product	CMCS provides a documents and data purge batch process. During the requirement gathering sessions, Celtic will understand and document NE DMV's document and data retention policies. The system will be configured by the number of years to accommodate NE DMV's document and data retention requirements.
IF.1.5	System shall provide a means to flag a carrier under appeal, including the date flagged and the date resolved.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to indicate that the carrier is under appeal by selecting the "Set Appeal Flag" at the time of processing a tax return.
IF.1.6	System shall allow authorized NE DMV Users to stop interest and penalty calculations for emergency situations by jurisdiction. (For example, filers were unable to submit returns on a timely basis during the COVID-19 pandemic.)	No	Vendor	4-Base Product	The CMCS IFTA provides the ability for authorized users to waive fees for penalty and interest. It also allows for the suspension of the penalty and interest calculation in emergency situations.
IF.1.7	System shall transmit IFTA data using IFTA - option 2. (https://www.iftach.org/manuals/2022/PM/Pr ocedures%20Manual%20-%2012-2021.pdf)	Yes	Vendor	4-Base Product	CMCS IFTA provides the ability to transmit tax return data to the clearinghouse using Option 2.

IF.1.8	System shall provide a means of tracking sent and received IFTA transmittals to ensure proper payment and distribution.	No	Vendor	4-Base Product	CMCS IFTA is fully compliant with the IFTA, Inc. transmittal and clearinghouse requirements. The IFTA clearinghouse files (data and summary) are created by a CMCS IFTA batch job as a part of the monthly transmittal process for upload to the clearinghouse for the participating jurisdictions and generate the required report for the individual non-participating jurisdictions as required by the IFTA.
IF.1.9	System shall provide the capability to upload IFTA demographic data to the Clearinghouse on a daily basis per IFTA requirements.	Yes	Vendor	4-Base Product	CMCS IFTA provides the ability to create a demographic file via a batch job as part of the daily process for uploading to the IFTA Clearinghouse.
IF.1.10	System shall generate monthly transmittals of monies owed to IFTA Clearinghouse member (and non-member) jurisdictions. Transmittals must comply with IFTA standards and IFTA Clearinghouse requirements, including audit netting.	Yes	Vendor	4-Base Product	CMCS IFTA fully complies with the IFTA, Inc. transmittal and clearinghouse requirements. Transmittal data includes audit supplements. The Clearinghouse Netting process determines payments to Jurisdictions.
IF.1.11	System shall provide the ability to identify validation errors before generating a production transmittal, the ability to regenerate a transmittal if needed, and the ability to export transmittals to EXCEL or CSV.	No	Vendor	4-Base Product	CMCS IFTA provides the ability to create clearinghouse files (data and summary) via a batch job as a part of the monthly transmittal process for uploading to the IFTA clearinghouse. The clearinghouse file is loaded into the test environment for validation and then moved to production after client approval each month. The system allows rerunning the batch process as needed and exporting it to excel.
IF.1.12	System shall allow all users to see previously filed returns.	Yes	Vendor	4-Base Product	CMCS IFTA provides an inquiry module that allows users to search and view previously filed returns.
IF.1.13	System shall record fuel type and whether or not bulk fuel and GPS mileage tracking are being utilized by the MC Customer.	No	Vendor	3- Custom	CMCS records fuel type and details of bulk fuel utilization. During the requirement gathering sessions, Celtic will work with NE DMV to understand and document the NE DMV's GPS tracking flag utilization and configure the system to meet the requirement.
IF.1.14	System shall maintain bond and banking information at the MC Customer level, including type of bond (e.g., a bond with	No	Vendor	4-Base Product	CMCS provides functionality for bond management (New Bond, Update Bond, Bond Inquiry, Bond Report, Cash Bond

	an expiration date, a non-expiring bond, or cash deposit bond).				Deposit) that allows users to calculate bond amounts and record, manage, and track bond information.
IF.1.15	System shall provide for tracking, inquiry, storage, and letter reprint capabilities regarding notices (i.e., suspensions).	No	Vendor	4-Base Product	CMCS IFTA provides the ability to reprint Licenses, Tax Returns, Temp Decal permits, Shipping Documents, Audit Invoices, and Suspension Letters.
IF.1.16	System shall perform a real time query against IFTA demographic data to validate any history and status when setting up a new account.	No	Vendor	3- Custom	CMCS shall provide the ability to check the IFTA Demographics file for suspensions and/or revoked accounts in other jurisdictions while setting up a new account.
IF.1.17	System shall assess interest and penalties on delinquent returns that support the IFTA governing documents, All NE law, and NE state agency rules and regulations.	Yes	Vendor	4-Base Product	CMCS generates invoices with assessments/penalties for any non-paid and Tax returns. This process will be modified to include NE Law and NE State agency rules and regulations.
IF.1.18	System shall provide an administrative function through an easy-to-use interface that allows authorized NE DMV Users to update table values for interest and penalties to reflect current policy. The system must be capable of maintaining table data from previous years to enable	Yes	Vendor	4-Base Product	CMCS IFTA provides a user interface to upload the tax rate matrix from the IFTA Inc. website. It also provides a user interface to update the tax rate if the jurisdiction provides updates after they are published. It also provides the ability to maintain the previous year's tax rates used to conduct an amendment or audit.
	appropriate audit and amended return functions. Table values will include tax rates.				The CMCS IFTA provides a user interface to upload the interest rate matrix from the IFTA Inc. website, which handles both new and updated rates.
					Administrative Fee user interface functionality is available to update the penalty.
IF.1.19	System shall identify/store whether MC Customer is a quarterly or annual filer.	No	Vendor	4-Base Product	CMCS IFTA provides the indicator for fuel type, whether a quarterly or annual filer, at the license level.
IF.2	Credential Administration				
IF.2.1	System shall provide the capability to print IFTA permits in compliance with IFTA format and printing standards, with the	Yes	Vendor	4-Base Product	CMCS IFTA provides the ability to print an IFTA permit (license) in compliance with IFTA format and printing standards, whether on-demand or via batch printing. The

	option of on demand or batch printing, and provide the ability to send IFTA permits electronically.				system can send the IFTA permits to the respective carrier via email or fax.
IF.2.2	Upon DMV action, system shall assign IFTA decals to MC Customers in a batch process, or individually on demand, after payment has been received.	Yes	Vendor	4-Base Product	CMCS IFTA provides the ability to assign IFTA decals through the inventory module, whether on-demand or via batch processing, after receiving the payment.
IF.2.3	System shall allow NE DMV Users to assign all eligible MC Customers IFTA decals individually or through a batch process.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to assign IFTA decals through the inventory module, whether on-demand or via batch processing.
IF.2.4	System shall allow MC Customers in good standing to request decals, including additional decals.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to issue additional decals to customers in good standing.
IF.2.5	System shall provide the ability for MC Customers in good standing to issue temporary IFTA decals.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to issue temporary IFTA decals with a validity of 30 days to customers in good standing.
IF.2.6	System shall provide the ability to search by decal number.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to search by product control number (decal number) through inventory inquiry.
IF.3	Tax Return Processing				
IF.3.1	System shall provide a workflow for receiving and processing paper IFTA returns by NE DMV Users.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability for internal users to process or enter paper IFTA returns in the application by selecting the actual Postmark date (filed date).
IF.3.2	System shall produce a quarterly IFTA return in the format requested by MC Customer both on demand and as a batch process.	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to generate quarterly IFTA returns on demand or via batch processing. During the requirement gathering sessions, Celtic will understand and document the NE DMV's quarterly IFTA return format and configure the system to meet the requirement.
IF.3.3	System shall contain front-end edits to ensure accuracy when quarterly fuel tax returns for all fuel types are entered.	Yes	Vendor	4-Base Product	The CMCS IFTA provides hard edits, soft edits with overrides, warning messages, and informative messages while processing the tax return.

IF.3.4	System shall allow MC Customers to override edits with comments after NE DMV approves the request.	No	Vendor	4-Base Product	The CMCS IFTA provides the ability for an external user to override edits with a comment and an application submitted for internal user approval.
IF.3.5	The system shall allow an MC Customer to add comments when entering a tax return to provide explanations for particular situations related to the return entered.	No	Vendor	4-Base Product	The CMCS IFTA provides the ability for MC Customers to add comments when submitting a tax return to provide explanations to NE DMV internal users.
IF.3.6	System shall support tax returns uploaded in multiple formats. (e.g., CSV, Excel spreadsheet, XML, fixed format text file, etc.)	No	Vendor	3- Custom	The CMCS IFTA solution provides the ability for the service provider (third party) users to upload a tax return in a fixed- format text file.
					During the requirements gathering sessions, Celtic will understand and document the NE DMV's need to support multiple formats. The system will be configured to meet the requirement.
IF.3.7	The system shall allow all users to file a tax return indicating that "no operations" have been conducted during that quarter.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to file a tax return by selecting the "No Operation" indicator if no travel or business was conducted during that quarter.
IF.3.8	System shall allow MC Customers to report miles travelled and gallons of fuel used in non-IFTA jurisdictions and unsupported fuel types. (In NE, called OT miles and gallons.)	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to capture "Miles in Non–IFTA Jurisdictions" and "Fuel for Non-IFTA Jurisdictions".
IF.3.9	The system shall allow all users to process amended returns back three (3) years or 12 quarters.	No	Vendor	4-Base Product	The CMCS IFTA solution meets this requirement. The system allows external users to make amendments to the current year or up to 3 years in the past.
IF.3.10	The system shall allow all users to process multiple amended returns and maintain history. System shall follow NE DMV business rules for amending a return with an automated workflow to assist in supervisory review.	No	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to perform multiple amendment returns with historical information. The system will be modified to include NE DMV business rules and transaction workflow as required.
IF.3.11	System shall provide the ability to remove an outstanding return for reasons to be determined by authorized NE DMV User.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability for authorized users to cancel an outstanding return. It also allows for the payment of outstanding returns by adjusting the amount.

IF.3.12	System shall provide for the MC Customer to request an abatement of penalty.	No	Vendor	4-Base Product	The CMCS IFTA solution allows external users to submit returns for internal review and approval with a request (including comments) for penalty abatement.
IF.3.13	System shall allow NE DMV Users to waive the late-filing penalty and maintain that information for the duration of the record retention period.	Yes	Vendor	4-Base Product	The CMCS IFTA solution allows authorized NE DMV users to waive penalties and maintain the information.
IF.3.14	The system shall allow an MC Customer in good standing to submit a request online to close their account upon DMV review.	No	Vendor	4-Base Product	The CMCS IFTA solution allows a carrier in good standing to submit a request to close their account by enabling the "Cancel IFTA License" indicator and entering the "Cancellation Date" at the time of tax return processing. Thereafter, the system queues up the request in the Cancel Account Queue for internal review and approval.
IF.3.15	System shall provide the ability to identify and manage return discrepancies per IFTA clearinghouse requirements and NE DMV business rules.	Yes	Vendor	4-Base Product	The CMCS IFTA solution is fully compliant with the IFTA, Inc. transmittal and clearinghouse requirements. The CMCS IFTA allows for correction or amendment transactions and provides the ability to make corrections once the monthly transmittals are sent to the IFTA Clearinghouse. The following transmittal process will select this transaction and automatically send corrections to the clearinghouse in compliance with the IFTA guidance.
IF.4	IFTA Refund Processing				
IF.4.1	System shall process on demand refunds and routine batch refunding of return credits per NE DMV business rules.	Yes	Vendor	4-Base Product	The CMCS Refund Management module allows authorized users to approve refunds on accounts. These refunds are tracked and recorded in the financial reconciliation reports. The system provides configuration for refund amount thresholds, preventing refunds on accounts with money due, etc.
IF.4.2	System shall prevent refunding of anything less than the NE DMV designated minimum amount. Amounts greater than the maximum must be validated prior to	Yes	Vendor	4-Base Product	CMCS provides configuration for minimum and maximum refund amount thresholds, preventing refunds on accounts less than the minimum threshold.
	processing. Minimum and maximum amounts must be configurable by authorized NE DMV Users.				
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IF.4.3	System shall allow delay and/or denial of IFTA refund processing based on NE DMV business rules (i.e., assessed audit or outstanding return), and notify the MC Customer of the reason for delay/denial.	No	Vendor	4-Base Product	The CMCS Refund Management module allows authorized users to deny refunds on accounts with denied reason codes and generates the refund summary report as well as the refund denial letter.
IF.4.4	System shall provide and maintain a refund status field at the program level.	Yes	Vendor	4-Base Product	CMCS provides Refund Management (Refund Approval, Refund Inquiry, Refund Report) to maintain refund status and additional refund information.
IF.4.5	Credits, when not refunded or used to offset a tax reporting liability, shall be deleted after eight (8) calendar quarters have passed, from the end of the calendar quarter in which the credit was accrued.	No	Vendor	4-Base Product	CMCS includes a batch job called "IFTA Credit Remove Batch" that removes credits that have not been used in the previous eight quarters.
IF 5	Non-Filers and Balance Dues				
11.5	Non There and Balance Baco				
IF.5.1	System shall provide an automated notice of the suspension and revocation for late filers and balance dues per NE DMV business rules.	Yes	Vendor	4-Base Product	The CMCS IFTA solution includes batch jobs called "Non-Filer Suspension", "Non-Payer Suspension", and "Audit Suspension" that generate the notices for late filers and balance due carries.
IF.5.1 IF.5.2	System shall provide an automated notice of the suspension and revocation for late filers and balance dues per NE DMV business rules. System shall provide the ability to print or email balance dues and outstanding notices at MC Customers' request.	Yes	Vendor	4-Base Product 4-Base Product	The CMCS IFTA solution includes batch jobs called "Non-Filer Suspension", "Non-Payer Suspension", and "Audit Suspension" that generate the notices for late filers and balance due carries. The CMCS IFTA solution provides the ability to generate the balance dues and outstanding notices in printable or PDF formats or email them at the customer's request. It also includes the Reprint functionality to print the outstanding balance due tax return notice or suspension notice.
IF.5.2 IF.5.3	System shall provide an automated notice of the suspension and revocation for late filers and balance dues per NE DMV business rules. System shall provide the ability to print or email balance dues and outstanding notices at MC Customers' request. System shall assess penalties on MC Customers that fail to pay in a timely manner per NE DMV business rules.	Yes No No	Vendor Vendor Vendor	4-Base Product 4-Base Product 4-Base Product	The CMCS IFTA solution includes batch jobs called "Non-Filer Suspension", "Non-Payer Suspension", and "Audit Suspension" that generate the notices for late filers and balance due carries. The CMCS IFTA solution provides the ability to generate the balance dues and outstanding notices in printable or PDF formats or email them at the customer's request. It also includes the Reprint functionality to print the outstanding balance due tax return notice or suspension notice. The CMCS IFTA solution assesses a late payment penalty and additional interest if not paid on time.

IF.5.5	The system shall assess a \$100 reinstatement fee on all revoked carriers per NE DMV business rules.	No	Vendor	4-Base Product	The CMCS IFTA solution includes a Reinstatement Supplement for charging the activation fee.
IF.6	IFTA Renewal Processing				
IF.6.1	System shall allow MC Customers in good standing to renew their IFTA account online and print permits remotely.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to renew the IFTA accounts online if a customer is in good standing and generates the license.
IF.6.2	System shall create four (4) IFTA returns required to be filed for the renewal year regardless of date of renewal.	No	Vendor	4-Base Product	The CMCS IFTA solution includes batch jobs called "Non-Filer Suspension" and "Non-Payer Suspension" to generate notices for late filers and balance due carries. During the renewal process, the system verifies that a carrier has filed and paid the tax return for the first three quarters of the most recent renewal year; otherwise, the carrier is not allowed to process the renewal.
IF.6.3	System shall provide an electronic renewal notice to MC Customers if they have requested electronic notification or print a renewal notice if an MC Customer has requested paper notification.	No	Vendor	4-Base Product	The CMCS IFTA solution provides a "Renewal Notice" batch job that sends an email notification if the e-filer option is selected; otherwise, a PDF notice is generated to print and mail. The CMCS IFTA solution also includes an "Automated Renewal Process" batch job that automatically processes the renewal and generates the license if a customer is in good standing.
IF.6.4	System shall allow NE DMV Users to receive and process multiple renewals and payments at one time.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to enter renewals individually, add invoices to a single cart, and pay together.

INTERNATIONAL FUEL TAX AGREEMENT (IFTA) COMPLETE

Requirements Traceability Matrix for Option 1: (MMCIS and a document management system) International Registration Plan - IRP (PR)						
Requirements	Requirements Bidder Response Section					

REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation
PR.1	General				
PR.1.1	System shall comply with the International Registration Plan (IRP), all NE law, NE state agency rules and regulations, and NE DMV business rules.	Yes	Vendor	4-Base Product	The IRP solution is fully compliant with IRP Inc. The solution provides the ability to register vehicles and calculate fees as per the IRP Inc. rules and regulations. We will customization the solution to comply with the NE Iaw, NE state agency rules and regulations, and NE DMV business rules.
PR.1.2	System shall alert all users of any non- compliant status at the MC Customer, program, and/or vehicle levels, and prevent further activity, as required by NE DMV business rules.	No	Vendor	4-Base Product	 The IRP solution validates the customer's and vehicle's status while processing IRP transactions. The system prevents and displays an error message on the search screen, and while processing the transaction, if a user attempts to process a transaction in cases where the customer, IRP account, fleet, or vehicle status is other than Active, CVIEW validation fails or does not comply with NE DMV's business rules. The system provides the edits by status edit matrix, which can be configurable. During the requirement gathering session, we will understand and document the NE DMV business rules to modify the system to meet the requirement.
PR.1.3	System shall be a browser-based solution that includes software components necessary to provide the IRP services as described in this Request for Proposal.	No	Vendor	4-Base Product	The IRP system is a browser-based application that provides the necessary software components for IRP services, including multiple browser support. The Enterprise module in the application includes a Prerequisites menu indicating the software components and the supported versions.

PR.1.4	System shall provide a history of account and fleet records.	Yes	Vendor	4-Base Product	The IRP solution provides the Inquiry functionality to allow users to search and view the history of an account or fleet. The history information displays details including but not limited to account or fleet status, account name and number, fleet type and other transaction details.
PR.1.5	 System shall provide search capabilities including but not limited to: Registrant's name (name search inquiries should be done by character and partial character search) DBA name FEIN/SSN Customer and fleet numbers USDOT number Plate number Vehicle identification number Unit number Invoice number 	Yes	Vendor	4-Base Product	The IRP solution allows processing information search using the following search parameters: Registrant's name (including character and partial character search) DBA name FEIN/SSN Customer and Fleet Number Plate Number Vehicle Identification Number Vehicle Identification Number Fleet Number Fleet Number Fleet Expiration Year The system uses various search parameters based on their relevance for a given inquiry function.
PR.1.6	System shall provide a minimum set of standard reports based on NE DMV needs.	Yes	Vendor	4-Base Product	The IRP solution comes with a standard set of reports including but not limited to the Account List Report, Non- Renewal Accounts Report, Carrier Vehicle List Report, Originals Not Paid Report, Supplement Tracking Report, Supplement Status report, Aging report, Ledger Report, and more. During the requirement gathering session, we will understand and document the NE DMV needs to modify the system to meet the requirement.
PR.1.7	System shall generate automated letters to print and/or e-mail based on MC Customer	Yes	Vendor	3- Custom	The IRP solution provides the ability to generate automated letters to print and email based on customer preference.

	preference and NE DMV business rules (e.g., delinquency, suspension, refund letters, etc.).				Our system includes the suspension and refund batch processes that select the eligible records to generate and/or send notifications to the customer via print or email. Our Enterprise module includes the Reprint functionality for suspension and renewal that can be printed or emailed to the customer. During the requirement gathering session, we will understand and document the NE DMV business rules to modify the system to meet this requirement.
PR.1.8	System shall provide the ability to reprint and/or re-email all invoices and notices sent through the system including renewal notices and letters.	Yes	Vendor	4-Base Product	The IRP solution comes with the out of the box Reprint functionality that allows users to reprint invoices, shipping documents, cab cards, delete vehicle letters, renewal notices, etc. Users can reprint the required document or notices in the preferred electronic delivery format such as PDF, email, or print. The system emails the document to the registered email
					address of the carrier at the fleet level.
PR.1.9	System shall provide the ability to print renewals or mass letters on NE DMV printers.	Yes	Vendor	4-Base Product	The IRP solution includes a renewal notice batch process that generates and sends the renewal notice to individual fleet carriers. The system also allows downloading the generated notices/letter and sending them to a designated printer. The system will be configured to print letters on NE DMV specific printers.
PR.1.10	System shall provide the ability to change and track carrier type (e.g., for hire, exempt, private, household).	No	Vendor	4-Base Product	The IRP provides the Supplement Inquiry functionality to track changes in carrier type. Users can perform the Change Carrier Type supplement to update the carrier type.
PR.1.11	System shall provide a means to validate changes to demographic information when required.	No	Vendor	4-Base Product	The IRP validates the changes to demographic details at the time of customer registration and customer update through CVIEW.

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					For instance, if a user updates the customer address or TIN/USDOT, the system will validate the changes to ensure the updates match the customer information in CVIEW. Once the demographic changes are processed, the system indicates the user to perform the Change Fleet Details supplement at the IRP level while processing any supplement to ensure the demographic changes reflect across all transactions and in the credentials issued.
PR.1.12	System shall provide the ability to add comments to an account at the fleet and supplement levels. Date/time stamp and User ID are required. Comments are maintained until the data for the registration year is purged.	No	Vendor	4-Base Product	The IRP solution provides a comment section available at the bottom of the screen at the account, fleet, vehicle, distance, weight, billing, and supplement levels. Besides the entered comments, the system captures the date, time stamp, and access levels indicating the user roles allowed to view the comment. The "Delete Allowed" indicator allows authorized users to delete the entered comments in the future. Below is a sample screen of the comment section available at the account and various other levels:
PR.1.13	System shall provide the ability to operate in two (2) years at the same time. The next year's registration renewal information can be entered at least 90	Yes	Vendor	4-Base Product	CMCS allows processing supplements in the current year at the same time when the renewals for the next year are processed 90 days before the fleet expiration date.

	days prior to the current registration expiration date.				
PR.1.14	System shall provide the ability to search all invoices by fleet (paid and unpaid).	Yes	Vendor	4-Base Product	The IRP solution provides the Supplement Inquiry functionality to search invoices by fleet and supplements with various statuses, including Paid and Invoiced (unpaid).
PR.1.15	System shall generate monthly transmittals for both IDR and non-IDR member jurisdictions, which support IRP standards and IDR requirements. System shall send the file to the IDR via data repository requirements and provide the ability to export transmittals in Excel and CSV formats.	Yes	Vendor	4-Base Product	The IRP solution includes the IRP transmittal batch process that generates reports as per the IRP standards and IDR requirements. The batch process also generates reports relevant to IDR and non-IDR member jurisdictions and transmittal summary in Excel and CSV formats.
PR.1.16	System shall provide the ability to generate a prenetting report to validate the IDR prenetting data.	Yes	Vendor	4-Base Product	The IRP solution provides the "Transmittal and Recap Report" functionality to generate a zip file consisting of various prenetting files as per IRP Inc. standards. These files contain the reports that allow validating the IDR prenetting data. Below is a sample screen of the generated Transmittal and Recap reports displaying the prenetting report to be sent to the IDR:
PR.1.17	System shall provide the ability to send transmittals electronically to other jurisdictions.	Yes	Vendor	4-Base Product	The IRP solution provides the capability to send the foreign jurisdiction refund transmittal notice via email.

PR.1.18	System shall block the issuance of a temporary registration or cab card to a suspended or revoked carrier or vehicle per NE DMV business rules.	Yes	Vendor	4-Base Product	The IRP solution validates suspended/revoked carriers and vehicles at the time of processing a new supplement, pending supplement, or attempting to generate an invoice or issue a credential. During the requirements gathering session, we will document and modify the system to meet the NE DMV business rules.
PR.1.19	System shall provide the ability for MC Customers (and their authorized reporting services) to perform the following functions via browser based self-service functions: • Electronically establish a new carrier. • Electronically submit renewals. • Electronically request all supplements including: a) Increasing weight; b) Adding and deleting vehicle(s) for credit transfer; c) Deleting vehicle(s) for refund; d) Adding vehicle(s); e) Requesting duplicate credential(s) (i.e., plate, cab card); and f) Editing vehicle details (i.e., unit number).	No	Vendor	4-Base Product	 The IRP solution provides web-based access to the external users (and their designated reporting services or service providers) through a self-service portal to perform the functions including but not limited to: New Carrier Registration Fleet Renewal Supplement Processing such as: Increasing weight Adding and deleting vehicle(s) for credit transfer Deleting vehicle(s) Reprint functionality to request duplicate credential(s) (i.e., plate, cab card); and Editing vehicle details Replace cab card or plate Fleet-to-fleet transfer The supplements processed by external carriers required NE DMV users' review and approval. Once the supplement is approved, the carriers can process the payment for the supplement to obtain the required credentials.
PR.1.20	System shall generate an on-demand, updated average vehicle distance chart (AVDC) in accordance with IRP requirements to enable the calculation of fees.	Yes	Vendor	4-Base Product	The IRP solution includes an average per vehicle distance chart (APVD) batch process to generate the average vehicle distance chart in accordance with the IRP requirements.

PR.1.21	System shall maintain all jurisdictional weight requirements including maximum jurisdictional weights and maximum cab card weights and shall update automatically as jurisdictional changes arise. This shall include the 10% variance rule.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to update the maximum jurisdictional weights through the "Update Jurisdiction" functionality. The user must set an effective date for the updated jurisdictional weight to be in effect. The system then utilizes the updated jurisdiction weights during new account/new fleet supplements to declare the jurisdiction cab card weights and apply the 10% variance rule at the weight group level.
PR.1.22	System shall allow NE DMV Users to record that a plate or an Affidavit of Lost Credential was returned.	No	Vendor	4-Base Product	The IRP solution provides the Delete Vehicle supplement records and documents for the deleted vehicle along with the Delete Vehicle reason. The system also provides the Replace credential functionality to record the reason for returned/deleted vehicles and capture the required documents.
PR.1.23	System shall allow comments or notes to be entered by MC Customer when uploading documents.	No	Vendor	4-Base Product	The IRP solution allows users to add comments at the time of uploading/submitting documents relevant to a supplement through its Web Processing – Submit functionality.
PR.1.24	System shall purge MC Customer information when inactive, per NE DMV business and records management rules.	No	Vendor	3- Custom	The IRP solution includes a purge batch process to purge information as required based on a pre-defined criterion. During the requirement gathering session, we will understand and document the NE DMV business and records management rules to meet this requirement.
PR.1.25	System shall provide registration information to NLETS queries and the NLETS interface.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to process registration information to NLETS queries and the NLETS interface.
PR.2	New Account Processing				
PR.2.1	 System shall provide a workflow process for establishing new accounts. Required new account data includes: Carrier information and profile (names, DBA, email, addresses, phone) 	No	Vendor	4-Base Product	 The IRP solution includes the workflow process for registering new accounts and captures the following new account information: Carrier information and profile (Carrier name, type, DBA, address, email, phone, base jurisdiction)

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	 FEIN or SSN for the account/fleet Contact information (names, email, address, phone) A contact preference indicator USDOT number for the account/fleet Third Party Agent contact information Type of business operations (private, for hire, etc.) Capture and maintain indicators at the account/fleet level to administer unique jurisdiction requirements or fees (i.e., The Wyoming Operating Authority). 				 FEIN or SSN for the account/fleet Contact information (name, email, phone, residential and mailing addresses) A contact preference indicator USDOT number for the account/fleet Third-party agent contact information Type of business Escrow information Submission of documents required for account registration Indicators at the account/fleet to administer unique jurisdiction requirements or fees (including The Wyoming Operating Authority)
PR.2.2	System shall allow MC Customers to submit documents when setting up a new account (i.e., W-9, recordkeeping notice, proof of residency, and POA if needed). Documents shall be subject to approval by NE DMV prior to account generation.	No	Vendor	4-Base Product	 The IRP solution provides the ability for users to upload required documents at the account registration level. The NE DMV authorized users then review the submitted documents for approval or rejection. A list of the required documents includes W-9, recordkeeping notice, Proof of Residency, and POA. During the requirements gathering session, we will understand and document the list of documents required for account registration. CMCS Document Edit Matrix shall be configured to meet this requirement.
PR.2.3	System shall utilize the AVDC for all jurisdictions on an original or renewed fleet if applicable.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to use the Average Vehicle Distance Chart (AVDC) to add estimated distances for all jurisdictions. The system displays an indicator for utilizing AVDC on the distance screen at the time of processing a new account/fleet supplement or renewal supplement.
PR.2.4	System shall allow entry of actual distances on an original fleet creation, renewal, or correction supplement if applicable.	Yes	Vendor	4-Base Product	The IRP solution provides the ability for the users to add actual distances for all jurisdictions on the distance screen. The system allows the user to select the Distance Type (i.e., Estimated or Actual) at the time of processing new account/fleet registration, renewal, and error correction supplement.

PR.2.5	System shall generate an error message if the system calculated total mileage does not equal total mileage entered.	Yes	Vendor	4-Base Product	The IRP solution provides the capability to accurately calculate the total mileage on the distance screen and validate if the system-calculated total does not match the total mileage entered manually.
PR.2.6	System shall store/display mileage/jurisdiction information.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to store the mileage/jurisdiction information. The Distance Inquiry function allows viewing the jurisdiction information when needed.
PR.2.7	System shall store/display the applicable mileage reporting period for the registration period.	No	Vendor	4-Base Product	The IRP solution provides the ability to store and display the mileage reporting period for the registration period on the Distance screen for various supplements.
PR.2.8	System shall identify noncontiguous operations (i.e., has miles in CA & FL but none in between), and require MC Customer to provide a reason why noncontiguous operations exist. The MC Customer will be allowed to proceed with the transaction after approval by the NE DMV.	No	Vendor	4-Base Product	The IRP solution identifies and validates the non-contiguous jurisdictions on the distance screen. Supplements with non-contiguous distance require NE DMV users' review and approval for further processing.
PR.2.9	System shall process a Current Year Mileage Correction supplement and ensure that all supplements processed after the correction are based on the corrected new percentages entered (i.e. have the capacity to recalculate each supplement and all future supplements).	No	Vendor	4-Base Product	The IRP solution provides the ability to process correction on the current year's mileage via the Error Correction Do- Distance supplement. The system will process all future supplements utilizing the corrected mileage information.
PR.3	Vehicle Registration Process				
PR.3.1	System shall provide for a two-way interface with Nebraska's VTR system (VicToRy) to send and receive title data. Contractor needs to provide a solution to assist NE DMV in keeping IRP data in sync with data in VTR.	Yes	Vendor	3- Custom	Celtic has experience interfacing the IRP solution with the jurisdiction's vehicle registration systems. We will modify the system to interface with Nebraska's VTR system (VicToRy) to send and receive title data. Celtic will assist NE DMV in keeping IRP data in sync with data in VTR.

PR.3.2	System shall provide the capability to generate a supplement application (for power unit and trailers) that contains all necessary fields for data entry following the format of the paper form.	No	Vendor	4-Base Product	CMCS transaction workflows are designed with human-like interactions in mind. The system works as a guide/ coach for the user and automatically walks them through the complete transaction step by step, including all necessary fields for data entry following the format of the paper form.
PR.3.3	System shall notify a carrier attempting to delete a permanent plate that the plate must be returned, or a notarized affidavit submitted. The System shall display a confirmation dialog that the user must acknowledge before allowing processing to continue.	No	Vendor	3- Custom	The IRP solution includes the Delete Vehicle supplement that allows the processing deletion of a vehicle and associated plate. This supplement requires the user to submit the necessary documents prior to deleting the vehicle and the associated plate. During the requirements gathering session, we will understand and document the NE DMV requirements related to deleting a plate to meet this requirement.
PR.3.4	System shall provide the ability to calculate a refund when the vehicle is deleted, based on NE DMV business rules.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to calculate the amount to be refunded when a vehicle is deleted. The system has a Refund functionality for the authorized users to review and process the refunds upon approval. During the requirement gathering session, we will understand and document the NE DMV business rules to meet this requirement.
PR.3.5	System shall provide the ability to edit vehicle details whether or not a fee is assessed. This process may include a call to the state's VTR system.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to edit the vehicle details prior to or after assessing the fees at the time of processing vehicle-specific supplements such as Amend Vehicle with Fee and Amend Vehicle without Fee. The system will be modified to interface with NE DMV's VTR system.
PR.3.6	System shall calculate fee differences due when a vehicle is transferred from one vehicle to another in an existing fleet. System shall also provide the ability to add/delete vehicles with transfer, applying	Yes	Vendor	4-Base Product	The IRP solution includes the Add/Delete Vehicle supplement to allow the user to add/delete a vehicle or transfer a vehicle within an existing fleet with appropriate fee calculations.

	appropriate credit from a deleted vehicle to an added vehicle, including vehicles that were deleted earlier in the current registration year.				The system charges fees for the newly added vehicles calculates the credit for the deleted vehicle, and displays the difference due for payment processing.
PR.3.7	System shall provide the ability to issue replacement cab cards and plates with and without fees.	Yes	Vendor	4-Base Product	The IRP solution includes the Replace Cab Card and Replace Plate supplements that allow users to replace the required credentials with the ability to waive the administrative fee at the billing level if required.
PR.3.8	System shall restore vehicle data when a vehicle transaction is cancelled (i.e., reverse transfer, reverse refund, etc.).	Yes	Vendor	4-Base Product	The IRP solution provides the ability to revoke a canceled vehicle transaction, restore the vehicle data processed earlier and reverse the transfer or refund as applicable.
PR.3.9	System shall provide a 2290 indicator for Form 2290 (Proof of Payment of Heavy Vehicle Use Tax) to indicate the status of the 2290 requirement from MC Customers.	No	Vendor	4-Base Product	The IRP solution displays the 2290 indicator for Form 2290 at the vehicle level. It also requires the carrier to provide a supporting document to indicate the status of the 2290 requirement.
PR.3.10	System shall alert all users when a vehicle weight requires an IRS Form 2290 and change the 2290 indicator to needed.	No	Vendor	4-Base Product	The IRP solution provides the functionality to collect and alert the user when a 2290 document is required at the time of processing a new vehicle. The system validates the weight of the vehicle and displays an error message at the top of the vehicle screen to collect the document. The system also includes the 2290 HVUT batch process under locking batch functionality that notifies users to provide the 2290 HVUT Form required for vehicle supplement
					processing.
PR.3.11	System shall populate a weight for all jurisdictions that is comparable to the registered combined gross weight with the ability to edit as needed.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to populate the weight for all jurisdictions that are comparable with the registered combined gross weight with the ability to edit the weight during the original supplements or via Change Weight Group supplement as needed.

PR.3.12	System shall allow an increase or decrease to the registered weight of a vehicle, based on NE DMV business rules.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to process the increase or decrease of the registered weight via the Change Weight Group supplement. The system will be modified to accommodate the NE DMV business rules.
PR.3.13	System shall populate vehicle data from the NE DMV VTR system based on VIN or title number and allow the information to be updated manually.	Yes	Vendor	3- Custom	Celtic has experience interfacing the IRP solution to populate the vehicle data from a third-party interface based on VIN or Title number and allow users to update the populated information manually as needed. The system will be modified to interface with NE DMV VTR to populate vehicle data based on VIN and the Title number.
PR.3.14	System shall provide the ability to copy vehicle data from similar vehicles when adding multiple vehicles in a single transaction.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to search and copy the vehicle data from similar vehicles existing in the system while adding multiple transactions in a single supplement.
PR.3.15	System shall verify the accuracy of a vehicle identification number through the use of a VIN verification service.	Yes	Vendor	3- Custom	The IRP solution interfaces with a VIN verification service to validate the accuracy of a VIN being entered on the vehicle screen for supplements such as Add Vehicle, New Fleet, Combined, etc. We will modify the system to interface with the VIN verification service to validate the VINs.
PR.3.16	System shall ensure continuous registration for previously Nebraska-plated vehicles, including county registered vehicles, through the NE DMV VTR system, per NE DMV business rules.	No	Vendor	3- Custom	The IRP solution provides the ability to ensure continuous registration of Nebraska-plated and county-registered vehicles via Fleet Renewal functionality. The system will be modified to interface with NE DMV VTR to validate the vehicle details.
PR.3.17	System shall allow NE DMV Users to correct errors on a received supplement before it is invoiced.	No	Vendor	4-Base Product	The IRP solution displays a supplement progress bar at the top of the screen while processing a supplement.

					Below is a sample screen of the IRP supplement processing progress bar:
PR.3.18	System shall provide the ability to manually add or remove administrative or other fees to an invoice (i.e., mail fee).	No	Vendor	4-Base Product	The IRP solution allows the users to override the administrative fees and manually adjust fees on the billing screen. The system also includes the Miscellaneous Fee module to allow the addition of administrative and other fees. The CMCS administer fee module allows authorized NE DMV users to modify, add, or remove specific fees as required by NE DMV.
PR.3.19	System shall provide the ability to refund overpayments with NE DMV approval.	Yes	Vendor	4-Base Product	The IRP solution provides the Refund module to track the refund transactions or overpayments and approve/reject them upon internal review.
PR.3.20	System shall provide a check box to identify a billed supplement as pending. Status changes are set by NE DMV business rules or DMV actions.	No	Vendor	3- Custom	The IRP solution includes the functionality to identify the billed supplements as pending through the Supplement Inquiry. During the requirements gathering session, we will understand and document the status changes required as per the NE DMV business rules or DMV actions to meet this requirement.
PR.3.21	System shall calculate bills according to the IRP agreement, all NE law, NE state agency rules and regulations, and NE DMV business Rules.	Yes	Vendor	4-Base Product	The IRP system provides the ability to calculate bills, various administrative fees, and jurisdiction fees as per IRP Inc. The system will be modified to calculate fees as per NE law, NE state agency rules and regulations, and NE DMV business rules.

PR.3.22	Invoice data shall contain all standard items,	Yes	Vendor	4-Base	The IRP system provides the ability to generate an invoice
	including these items:			Product	including the following details but not limited to:
	Invoice number				
	Invoice date				
	Account number				
	Fleet number				Account number
	Supplement number				Fleet number
	Registration year				Supplement number
	Veight for each jurisdiction listed on the				Eleet Registration month and year
	A Number of months hilled				Weight for each jurisdiction listed on the detailed hilling
	Number of vehicles billed				Weight for each jurisdiction listed on the detailed binning
	Registrant's name and address				Number of months billed
	Supplement transaction type (i.e., add				Number of vehicles billed
	equipment, duplicate cab card, etc.)				 Registrant's name and address
	 Administrative fees (i.e., mailing fees, penalty, 				 Supplement transaction type (i.e., add equipment,
	transfer fee, plate fee, etc.)				duplicate cab card, etc.)
	 Registration due Nebraska 				Administrative fees (i.e. mailing fees penalty transfer
	 Nebraska credit amount 				fee plate fee etc.)
	 Total net due Nebraska 				Degistration due Nebreake
	 Amount due foreign jurisdictions 				
	Foreign jurisdiction credit amount				Nebraska credit amount
	I otal net due foreign jurisdictions				Total net due Nebraska
	Total supplement amount Total supplement amount				 Amount due foreign jurisdictions
	Total Clean amount Total Salas Tax Due (State County City				 Foreign jurisdiction credit amount
	 Total Sales Tax Due (State, County, City, penalty, and interest) 				Total net due foreign jurisdictions
	Total Tire Fee				Total supplement amount
	Total Due				Total supplement amount
	 Canadian exchange date and rate 				Total Cleuit amount Tetal Oalas Tax Dus (Olata Oaunta Oite nanalta and
	Expiration month				• Total Sales Tax Due (State, County, City, penalty, and
	 Jurisdiction, mileage type, month/year, 				interest)
	mileage, %, charge, credit, net due				Total Tire Fee
	• Unit number, VIN, combined gross weight,				Total Due
	title, fees due				Canadian exchange date and rate
	Free text space for supplement comments				 Jurisdiction, mileage type, month/year, mileage, %.
					charge, credit, net due
					 Unit number, VIN, combined gross weight title fees
					Free text space for supplement comments
					Documents required for the supplement and collection
					status
					The invoice layout will be modified to accommodate NE DMV-
					specific requirements.
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PR.3.23	Invoice data shall be available in multiple formats, varying from summary to detail. A summary of invoice data shall be available for printing, with detailed data available on the system.	Yes	Vendor	4-Base Product	 The IRP solution provides multiple invoice types as follows: Summary Invoice Details Fees For Each Unit Detail Fees For Each Unit By Jurisdiction The system supports generating invoice reports in the desired formats, such as PDF, Print, and Email.
PR.3.24	System shall recalculate IRP registration fees after corrections and maintain original invoice date.	No	Vendor	4-Base Product	The IRP solution provides the Recalculate button on the invoice screen to recalculate the fees, retaining the original invoice date after processing necessary corrections.
PR.3.25	System shall provide the ability to print, email and export an invoice in summary or by individual vehicle.	No	Vendor	4-Base Product	The IRP solution provides the ability to generate the invoice report in the desired format, including PDF, Email, or Print. Users can select the preferred invoice report type from the billing screen, such as the summary of fees by individual vehicle.
PR.3.26	System shall provide the ability for all users to issue temporary registrations for all types of supplements and vehicles (power units and trailer). Temporary registrations shall include: • Carrier and vehicle information • Registered weight in each jurisdiction • Bar code • Safety carrier • Date of issue • Effective date • Reason for issuance • Expiration date	Yes	Vendor	4-Base Product	 The IRP solution allows users to issue temporary registration by selecting an indicator on the billing screen for various supplements. The temporary registration displays the following information as mentioned in the corresponding requirement: Carrier and vehicle information Registered weight in each jurisdiction Bar code Safety carrier Date of issue Effective date Reason for issuance Expiration date
PR.3.27	System shall provide the ability to print and e-mail a temporary IRP registration for all vehicles in a supplement or a single vehicle. The	Yes	Vendor	4-Base Product	The IRP solution provides the ability to print/reprint, email/re- email the temporary IRP registration for multiple or individual vehicle(s) in a supplement.

	ability to re-print and re-email shall also be provided.				
PR.3.28	System shall automatically track temporary registrations, in expiration date order, to include documents that have not been received. System shall also provide the ability to generate an ad hoc report of this information.	No	Vendor	4-Base Product	The IRP solution provides the capability to track incomplete temporary registrations via the TA Report functionality. The system also provides the Ad Hoc report functionality to track the paid/unpaid transactions with incomplete temporary registrations, filtered by expiration date or other criteria, and generate the report in the desired format.
PR.3.29	System shall provide the ability to correct, extend, and cancel temporary registrations per NE DMV business rules.	Yes	Vendor	4-Base Product	The IRP solution provides the ability the correct, extend and cancel temporary registrations. During the requirements gathering session, we will understand and document the NE DMV business rules to meet this requirement.
PR.3.30	System shall prevent all users from issuing or reprinting temporary registrations if MC Customer is suspended or revoked.	No	Vendor	4-Base Product	The IRP solution validates customer status upon customer search preventing the user from processing issuance of/reprinting the temporary registration if the customer status is Suspended or Revoked.
PR.3.31	System shall allow MC Customer to apply for a refund upon the deletion of a vehicle per NE DMV business rules.	No	Vendor	4-Base Product	The IRP solution allows users to claim a refund for a deleted vehicle through the Refund functionality. We will modify the system to accommodate the NE DMV business rules applicable for the refund and deletion of a vehicle.
PR.3.32	System shall provide the capability to create an Affidavit of Lost, Stolen or Destroyed Credential if plate is not returned when vehicle is deleted.	No	Vendor	4-Base Product	The IRP solution provides the Replace credential functionality to record the Affidavit of Lost, Stolen, or Destroyed credential if the credential is not returned when the vehicle is deleted.
PR.3.33	System shall display supplement history, with the option to print and export.	Yes	Vendor	4-Base Product	The IRP solution provides the Supplement Inquiry functionality to view, print, and export the supplement information.
PR.3.34	System shall provide the ability to attach documents and image files (in an NE DMV approved format) to a supplement for documentation.	No	Vendor	4-Base Product	The IRP solution interfaces with CTS-Doc (Celtic's Document Management System) to provide for document/image upload to a supplement in the pre-defined layouts.

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PR.3.35	System shall create supplement numbers for each transaction processed within an account and fleet.	Yes	Vendor	4-Base Product	The system assigns a unique number to each supplement in an incremental order created within an account and fleet. The base supplement starts with supplement number "0".
PR.3.36	System shall provide the ability to update the PRISM census name, DOT number (Motor Carrier Responsible for Safety), and address information for cab card printing purposes.	Yes	Vendor	4-Base Product	The IRP system provides the ability to update the PRISM census name, DOT number, and address information for cab card printing in CVIEW.
PR.3.37	System shall provide the ability for NE DMV Users to process mass updates to a selected set of units via a single transaction (i.e., master account changes to assess fees and reprint all cab cards, unit DOT number changes, weight changes, etc.).	No	Vendor	4-Base Product	The IRP solution provides the ability to process mass updates to a set of units in a single transaction. For instance, the Amend Vehicle with Fee supplement allows updating multiple vehicles (such as Unit No., Purchase Price, etc.) and generating new cab cards for the updated vehicles in the same supplement. Likewise, the Change IRP Weight Group supplement allows adding, editing, or deleting multiple weight groups in the same supplement.
PR.3.38	System shall allow an authorized NE DMV User to process a full year refund of all fees paid, including fees to foreign jurisdiction.	Yes	Vendor	4-Base Product	The IRP solution allows authorized users to process a full-year refund of all fees paid (including foreign fees) via the Error Correction Undo Vehicle functionality. The IRP solution provides the Error Correction Undo-Vehicle functionality to process supplements like Add Vehicle, which allows a full refund of the base jurisdiction fees, foreign jurisdiction fees, and administrative fees. The system also allows revoking the supplement via the Same Day Cancellation or the Next Day Cancellation to refund the full amount of the supplement or transfer the same to the escrow account.
PR.3.39	System shall allow for the creation, issuance, and collection of fees for Unladen Weight (Hunter) Permits.	No	Vendor	4-Base Product	The Enterprise solution provides the Permit issuance module that allows the registered users to create, issue, and collect fees for Unladen Weight (Hunter) Permits.

PR.3.40	System shall provide the ability to correct a previously paid supplement, recalculate data, and either refund or collect additional fees as appropriate.	Yes	Vendor	4-Base Product	The IRP solution provides the Error Correction functionality to correct vehicle or distance information on a previously paid supplement, recalculate the fees, and either refund or collect additional fees as applicable.
PR.3.41	System shall provide the ability to update unit DOT numbers and maintain history of previous DOT numbers.	No	Vendor	4-Base Product	 The IRP solution provides the following functionalities to process the Unit DOT changes: Amend Vehicle without Fee – This functionality allows updating the Unit DOT numbers for a vehicle. Update Customer – This functionality allows changing USDOT and TIN updates at the customer level. The system indicates the user to perform the Change Fleet Details supplement to ensure the updated USDOT and TIN reflects across all modules and supplements within the system. Users can also process changes to USDOT in CVIEW. The system provides the Vehicle Inquiry menu to track the changes in DOT numbers and view the history of the previous DOT numbers.
PR.3.42	System shall allow the upload of supplements in file formats approved by NE DMV.	No	Vendor	3- Custom	The IRP provides the functionality to upload specific file format for vehicle processing. The system will be modified to accommodate the NE DMV- approved file formats.
PR.4	Credential Administration	1			
PR.4.1	Upon DMV action, system shall assign a plate number and generate a cab card after payment has been received.	Yes	Vendor	4-Base Product	The flow of the supplements in the IRP solution is structured to assign the credentials after the payment is completed. Once a user completes a supplement, and the payment is collected, the supplement is marked as Paid. An authorized user then performs the Post Payment functionality to issue the required credentials (plate number and/or cab card). Once all credentials are issued, the system updates the status of the supplement to Closed.

PR.4.2	Once plates have been assigned, system shall provide the option for all users to email and print credentials on demand.	Yes	Vendor	4-Base Product	The IRP system captures the delivery format for generating the credentials at the time of payment processing.The system also includes the Reprint functionality to allow reprinting credentials on demand.
PR.4.3	System shall provide the flexibility to print on demand credentials for carriers ranging from 1-30,000 vehicles.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to flexibly print on-demand credentials for carriers ranging from 1-30,000 vehicles via the Reprint functionality. Depending on the number of vehicles, the system shall process vehicles in batch mode and notify users when credentials are generated.
PR.4.4	System shall provide the capability to email and print Proof of Prorate letters.	Yes	Vendor	4-Base Product	The IRP system has a reprint module to generate the letters in the preferred delivery format, such as PDF, Email, Print, or Fax.
PR.4.5	System shall maintain and assign plates for large carriers with their own unique plate numbers by plate type.	Yes	Vendor	4-Base Product	The IRP solution comes with the Self-Issuance inventory functionality that allows large carriers to assign and maintain their inventory through the Inventory module. The carriers can add a pre-defined range of a given inventory type for their account number.
PR.4.6	 System shall provide options to print and reprint cab cards in any of the following ways: All vehicles in fleet All vehicles in supplement Individually by unit number in fleet. 	Yes	Vendor	4-Base Product	The IRP system includes the Reprint Cab Card functionality to reprint cab cards as needed based on the entered search inputs. The search results display a list of vehicles in a grid where the user can select the vehicles in bulk or individually to print or reprint the cab cards.
PR.4.7	System shall generate a mailing label or mailing document (for the mailing of plates), in the same order the plates are assigned.	Yes	Vendor	4-Base Product	The IRP solution provides the ability to generate mailing addresses or shipping documents along with the cab cards after executing the post-payment for a paid transaction. The system prints the mailing address and shipping documents in the same order as the plates.

PR.4.8	System shall provide a means for NE DMV to identify when a paid transaction requires NE DMV to send a plate and registration cab card. For example, if the carrier prints their own cab cards, NE DMV would mail the plate only.	No	Vendor	4-Base Product	 The current IRP system is designed to execute Post Payment on the paid transactions to issue the plates and cab cards as required. The transactions submitted by external users are queued up for internal review. The authorized users access the Web Processing – Pending functionality to review such transactions and determine the eligibility of the credential issuance.
PR.4.9	System shall provide an indicator to reflect whether the plate should be mailed or is being picked up by an MC Customer or reporting service.	No	Vendor	4-Base Product	The IRP solution supports mailing and pick-up for plate issuance for carriers and reporting services/service providers.
PR.4.10	System shall provide for the generation of a cab card and temporary registration which contains a PRISM compliant (PDF417) bar code printed directly from the system.	Yes	Vendor	4-Base Product	The IRP solution generates a cab card and temporary registration with the PRISM bar code printed directly from the system.
PR.4.11	System shall maintain credential- issuance history by plate number.	Yes	Vendor	4-Base Product	The CMCS solution provides the Issued Inventory functionality to maintain and view the credential issuance history by plate number.
PR.4.12	System shall allow authorized NE DMV Users to manage inventories and credentials that are self-issued by authorized MC Customers.	Yes	Vendor	4-Base Product	The CMCS solution provides the Self-Issuance functionality to manage the inventory and credentials self-issued by authorized users.
PR.5	Sales Tax and Tire Fee Processing		•		•
PR.5.1	System shall provide the ability to download and check Nebraska Department of Revenue (DOR) file of sales tax exempt and 01-ID numbers. If a carrier is not exempt or a check to file fails, system shall prompt all users to either confirm 01-ID number or bill for sales tax appropriately - including state, county, city tax, and a penalty and interest assessment for late payments.	No	Vendor	3- Custom	The IRP solution calculates fees based on IRP Inc. and the jurisdiction's rules. During the requirement gathering session, we will understand and document the requirements specific to downloading and checking the Nebraska DOR file of sales tax exempt and 01-ID numbers.

PR.5.2	System shall provide a means to capture the number of tires for new vehicles (MSO) to assess a tire fee.	Yes	Vendor	4-Base Product	The IRP solution provides an indicator "New Vehicle" on the vehicle screen. The system calculates the tire fees as per the IRP Inc. rules based on the user's response to the indicator.
PR.5.3	System shall provide a means to recalculate daily interest upon payment and either create a credit or balance due on an MC Customer's account.	No	Vendor	4-Base Product	The IRP solution provides the ability to recalculate interest and penalties on the billing screen and create a credit or balance due on the customer account as appropriate.
PR.5.4	System shall create and complete a monthly sales tax form that conforms with DOR requirements for monthly remittance.	No	Vendor	3- Custom	The IRP solution provides the Ledger Report functionality that generates a report containing various fees for monthly remittance, including sales tax. The report displays the payments and calculated fees broken down transaction-wise for a given date range. We will modify the system to provide the monthly sales tax form that conforms with DOR requirements for monthly remittance.
PR.5.5	System shall maintain sales tax rate tables and allow authorized NE DMV Users to add and edit rates as needed.	Yes	Vendor	4-Base Product	The CMCS Administrative module allows authorized users to maintain administrative fees and sales tax rates.
PR.5.6	System shall print a Form 6 (Sales and Use Tax Form) on demand that replicates the DOR paper form, based on vehicle and ownership information input by any user.	No	Vendor	3- Custom	The solution provides the Report functionality to generate various on-demand reports based on relevant user inputs. We will modify the system to provide the ability to print a Form 6 on demand based on the vehicle and ownership details for user inputs.
PR.5.7	System shall provide the ability to bill sales tax on a separate invoice from IRP invoices.	No	Vendor	3- Custom	The IRP solution generates an IRP invoice report consisting of all fees charged for a given transaction, including sales tax. We will modify the system to produce an invoice distinctive from the IRP invoice to bill sales tax.
PR.6	Renewal Process	·	-	·	
PR.6.1	System shall provide an automated process for printing (based on user preference) and sending renewal	No	Vendor	4-Base Product	The IRP solution includes a Renewal Notice batch process that auto-generates renewal notices for carriers, including their demographic details, fleets, vehicle listings, mileage, etc.

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	notices with MC Customers' demographic information, vehicle listing, mileage, etc.				
PR.6.2	System shall provide the ability to transmit the current renewal information to individual MC Customers in an NE DMV approved format and receive updated information back from the MC Customer to process fleet renewal.	No	Vendor	4-Base Product	The IRP solution includes a pre-set template to deliver the renewal notice to carriers. We will modify the system to generate the renewal notice in the NE DMV-approved format.
PR.6.3	System shall provide the ability to send automatic reminders to MC Customers 14 calendar days prior to IRP expiration.	No	Vendor	4-Base Product	The IRP system provides an alert module to notify customers to receive renewal notifications. We will configure the system to send automatic reminders 14 days prior to the IRP expiration date.
PR.6.4	System shall include all vehicles active during the previous year in the renewal application.	Yes	Vendor	4-Base Product	The IRP solution provides the Update From Previous Year functionality on the renewal screen that allows to carry forward the active vehicles from the previous year to the renewal year at the time of processing the renewal.
PR.6.5	System shall provide the option for single fleet MC Customers to select IFTA distances for IRP renewals per NE DMV business rules. If option is selected, the system shall automatically populate with data from IFTA.	Yes	Vendor	4-Base Product	The IRP solution provides an indicator called "Use IFTA Distance" on the fleet screen. On selecting this indicator, the system auto-populates IFTA mileage for jurisdictions on the renewal distance screen if the IFTA mileage exists in the IFTA system for the given reporting period.
PR.6.6	System shall provide an automated process for printing and sending blank mileage sheets to MC Customers when the fleet record indicates IRP mileage should not match IFTA mileage.	No	Vendor	4-Base Product	The IRP solution includes a batch process that allows generating the blank mileage sheet with renewal notice for each fleet record if not associated with IFTA mileage.
PR.6.7	Based on NE DMV business rules, the system shall provide information to all users to assist in determining whether the AVDC or actual miles are	No	Vendor	4-Base Product	The IRP solution provides the functionality to auto-suggest the value Yes/No for the indicator "Do you have actual distance for the reporting period?" on the distance screen.

	appropriate (e.g., MC Customer was new after June 30 and has no distance to report).				Generally, the system sets the indicator to "No" and auto- populates the estimated distance for all jurisdictions when registering new fleets. Users can set the indicator to "Yes" if actual distance details are available for the reporting period. In cases of new fleet or fleet renewal, the system will indicate the user to use AVDC or actual miles as appropriate based on the State business rules.
PR.6.8	System shall provide an alert if there is a non-contiguous jurisdictional request after mileage has been entered and before the distance per jurisdiction percentage is figured.	No	Vendor	4-Base Product	The IRP system displays an alert to validate a non-contiguous jurisdiction prior to figuring the distance per jurisdiction when processing a transaction.In addition, the system provides an "Override Non-Contiguous" indicator for authorized users to register non-contiguous travel if needed.
PR.6.9	At time of renewal, system shall allow fleet-to-fleet transfer functions within the same account.	No	Vendor	4-Base Product	The IRP solution includes out of the box Fleet-to-Fleet Transfer functionality to allow users to transfer vehicles from one fleet to another within the same account. After processing a fleet-to-fleet transfer supplement, a user shall be able to process renewal on a given fleet if required.
PR.6.10	System shall allow any user to expire fleets individually when there are multiple fleets in the same account, based on NE DMV business rules.	No	Vendor	4-Base Product	The IRP solution allows registering multiple fleets in an account with different expiration dates. The system also provides the ability to update the default fleet expiration date for individual fleets in an account.
PR.6.11	System shall validate all appropriate edits (i.e., weights and 10% variances) for each vehicle during the IRP renewal process.	No	Vendor	4-Base Product	The IRP solution validates all the jurisdiction weights, applying the 10% weight variance rule based on the base jurisdiction weight at the time of registering a new weight group.Users can select the weight group at the vehicle level in a new or renewal supplement based on the weight groups available for the fleet. The registered weight groups are validated for the 10% variance rule at the time of weight group registration.

PR.6.12	System shall provide the ability to renew a single unit within the fleet after the renewal has been paid.	Yes	Vendor	4-Base Product	The IRP solution provides the Vehicle Reinstatement supplement functionality that allows the renewal of individual vehicles that were deleted at the time of processing the fleet renewal and after the renewal has been paid.
PR.6.13	System shall provide a means for NE DMV Users to review submitted renewals for approval of distance, vehicles, and Form 2290s; then set appropriate indicators.	Yes	Vendor	4-Base Product	The IRP solution includes the Web Processing-Submit functionality for external users to submit the transactions with required information and document to an internal review queue. The authorized internal users review the submitted transaction including renewal for approval of distance, vehicles, and Form 2290 and set appropriate indicators
PR.6.14	System shall allow authorized NE DMV Users to process an amended IRP renewal so that IRP registrations can be corrected without doing an audit, and then correct miles and percentages and adjust any supplements for that registration year.	No	Vendor	4-Base Product	The IRP solution provides the ability for authorized users to process amendments on the renewal to update the mileage of jurisdictions and vehicle information in the renewal supplement.
PR.6.15	System shall provide the ability to make changes to a renewed account and fleet prior to the effective date of the renewal.	Yes	Vendor	4-Base Product	The IRP solution provides the Update Account and Update Fleet functionalities to allow changing details on a renewed account and fleet prior to its effective date. The details updated reflect on the account and fleet screens while processing the renewal transaction. The system provides a pre-renewal functionality to process an early renewal.

INTERNATIONAL REGISTRATION PLAN (IRP) COMPLETE

Requirements Traceability Matrix for Option 1: (MMCIS and a document management system)					
Accounting & Payment Processing (AP)					
Requirements	Bidder Response Section				

REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation
AP.1	General				
AP.1.1	System shall allow MC Customers to make payments regardless of their status as allowed for by NE DMV business rules.	Yes	Vendor	4-Base Product	The CMCS solution comes with an out of the box payment module to allow processing payment using multiple methods, including cash, credit cards, and e-check, regardless of their fleet status. Celtic has extensive experience interfacing the Celtic Payment Processing module with state-provided/third-party credit card service providers. We will configure our CMCS payment module to accommodate the NE DMV business rules for payment processing.
AP.1.2	System shall prevent processing of non-guaranteed funds from customers who are required to pay in guaranteed funds.	Yes	Vendor	4-Base Product	CMCS provides in-built functionality that allows authorized users to update the customer account for acceptance of payment in cash or certified funds; when any authorized user tries to collect payment by check or e-check, the system provides a hard stop message.
AP.1.3	System shall provide the ability to pay multiple invoices with one form of payment at the same time.	Yes	Vendor	4-Base Product	 The CMCS solution provides a full payment collection functionality that allows accepting: Cart payment to pay more than one transaction depending on the business rules Collect payment with single or multiple payment tenders for single or multiple transactions. For example, part payment from multiple credit cards, part check and part cash, or part check and part credit card. The payment module is the same for every transaction. Creation of a payment receipt containing a transaction, payment receipt numbers, and transaction details.
AP.1.4	System shall provide the ability to pay invoices with multiple forms of payment.	No	Vendor	4-Base Product	The CMCS solution supports invoicing and processing of single and multiple payment types for the total amount due, including Cash, Check, Certified Check, Credit Cards, Escrow, etc.

AP.1.5	System shall allow for partial IFTA payments with the customer invoiced for the remaining balance.	Yes	Vendor	4-Base Product	The CMCS solution facilitates partial payment for IFTA tax return invoices while invoicing the customer for the remaining balance due.
AP.1.6	System shall interface with the NE Accounting System (E1) for automated payment of monthly transmittals, including payments to the IFTA Clearinghouse and IDR.	Yes	Vendor	3- Custom	 The CMCS solution is fully compliant with the IRP and IFTA transmittal and Clearinghouse, IDR requirements. The system provides the ability to send monthly transmittals, including payments to IFTA Clearinghouse and IDR, by generating Transmittal and Recap reports created for all jurisdictions. We will modify the system to interface with Ne Accounting System (E1) to automate monthly transmittal payments to IFTA Clearinghouse and IDR.
AP.1.7	System shall interface with the NE Accounting System (E1) to provide automated refunds.	Yes	Vendor	3- Custom	The CMCS solution will be modified to interface with NE Accounting System (E1) to accommodate this requirement. Currently, the system utilizes the Account Payable batch job functionality to create a Refund file with refund data and call a third-party service to process automated refunds.
AP.1.8	System shall interface with the NE Accounting System (E1) to receive an enhanced "feedback file" with refund information.	No	Vendor	3- Custom	The CMCS solution will be modified to interface with NE Accounting System (E1) to accommodate this requirement.
AP.1.9	System shall provide a cash management process for receiving cash and checks.	No	Vendor	4-Base Product	The CMCS solution provides an in-built functionality to support multiple payment tenders, including cash and checks, on the Payment Collection screen. The Finance module at the Operations level includes cashier drawers to support the processing, collection, and distribution of funds. It allows opening and closing cash drawers to register the funds collected based on each payment type for a given date, location, and user ID.

AP.1.10	System shall allow for authorized NE DMV Users to transfer credits between programs (IRP and IFTA).	Yes	Vendor	3- Custom	The CMCS solution will be modified to allow NE DMV users to transfer credits between IFTA and IRP accounts.
AP.1.11	System shall correct a payment type or amount without the need to void and reprocess the transaction until after the deposit is reconciled.	No	Vendor	3- Custom	The CMCS solution provides the Same Day and Next Day Payment Cancellation functionalities to allow correcting a payment type or amount even after the funds have been deposited. The payment for the canceled transaction is stored in the escrow account to use for repayment. During the requirement gathering session, we will understand and document the requirement to correct the payment type and amount without voiding the payment and prior to reconciling the deposit.
AP.1.12	System shall flag MC Customer accounts for agency debt write off, based on NE DMV business rules. Procedures shall include a report and a way to update these processes once approved by the State Legislature.	No	Vendor	3- Custom	The CMCS solution provides the functionality to flag customers and send them alerts for various reasons including bankruptcy. Once a customer is flagged for such purposes, the system prevents them from processing any supplements until they complete the outstanding payment. During the requirements gathering session, we will understand and document the NE DMV business rules to provide the functionality of flagging customers for an agency debt write-off.
AP.1.13	System shall provide the ability to reverse uncollectable accounts, including audits, and then transmit the information to the IDR and IFTA Clearinghouse.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to deem an account uncollectable and, thereby, reverse the payment including audits, and then transmit the information to IDR and IFTA Clearinghouse.
AP.1.14	System shall provide the ability to generate a ledger for a specific date range that separates Nebraska IRP fees from foreign IRP fees and administrative fees. The ledger shall be exported in an NE DMV approved format.	Yes	Vendor	4-Base Product	The CMCS ledger report provides all account-level financial history. The CMCS Finance module provides a daily ledger report that tracks all credits/refunds issued/applied to the account in summary format. In addition, CMCS has a "Credit / Escrow Report" that provides a summary of the Escrow balance and consumption.

					The CMCS daily ledger report provides both a summary and detailed level of daily revenue fund reporting for financial reconciliation including Financial information for the customer such as invoice number, invoice amount, payment date, and distribution of fees and adjustments based on GL Code. The CMCS ledger reports can be generated based on multiple search parameters such as the payment date range, deposit date range, and office location. The system provides an option to export real-time data in PDF documents or print. We will modify the system to export the ledger reports in an NE DMV-approved format.
AP.1.15	System shall produce a monthly report of net Nebraska dollars received to support monthly fund distribution within the State.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to produce a monthly report of net base-jurisdiction dollars received to support monthly fund distribution within the state. Below is a sample screen of the CMCS solution net base-jurisdiction amount to be distributed within the state: NAME of PAYEE FEDERAL ID NUMBER IRP ANDUNT AUDIT AMOUNT NET AMOUNT ALABAMA \$0.00 \$0.00 \$-2.24 \$-2.24 ARKANSAS \$0.00 \$0.00 \$-18.68 \$-18.68
					CALIFORNIA \$0.00 \$0.00 \$-31.00 \$-31.00 COLORADO \$0.00 \$0.00 \$-8.38 \$-8.38 CONNECTICUT \$0.00 \$0.00 \$-2.03 \$-2.03
AP.1.16	System shall provide a means of tracking transmittal data and payments (including partial payments) from the IDR and IFTA Clearinghouse.	Yes	Vendor	3- Custom	Celtic has experience implementing the functionality to upload IRP transmittal data from a text file sent by the IRP Clearinghouse system. During the requirement gathering session, we will understand and document NE DMV's requirement to track the transmittal and payments from IDR and IFTA Clearinghouse and configure the system to meet this requirement.

AP.1.17	System shall ensure that error corrections are properly addressed in the transmittal files.	No	Vendor	4-Base Product	The CMCS solution produces a distinct file containing error correction transmittals to be sent to the Clearinghouse.
AP.1.18	System shall include audit netting in transmittals.	Yes	Vendor	4-Base Product	The CMCS solution produces a distinct file containing audit netting transmittals to be sent to the Clearinghouse.
AP.1.19	System shall provide the ability to pay invoices out of order, including invoices from different registration years. System shall alert all users of outstanding invoices. The appropriate credential(s) will be issued based on NE DMV business rules.	Yes	Vendor	4-Base Product	The CMCS solution allows processing payments for expired/out-of-order invoices. The system sends an email notification to customers for outstanding invoices through the Suspension batch job. The system issues credentials for a transaction only after the payment is collected. We will modify the system to accommodate the NE DMV business rules for payment processing and credential issuance.
AP.1.20	System shall provide the ability for NE DMV Users to mass receipt payments received per NE DMV business rules.	Yes	Vendor	3- Custom	The CMCS solution will be modified to generate the payment receipts in bulk as per the NE DMV business rules.
AP.1.21	System shall allow authorized NE DMV Users to cancel a payment.	Yes	Vendor	4-Base Product	The CMCS solution provides the Same Day Cancellation facility to cancel a payment before it is reconciled and deposited.
AP.1.22	After all amounts are originally transmitted and once the account has been determined uncollectible, the system shall provide the ability to adjust for partial IFTA payments received (i.e., audit, bankruptcy, or levy). System shall correct transmittal data based on prorated amounts resulting from partial payment.	No	Vendor	4-Base Product	The CMCS IFTA provides the ability to identify an uncollectible return with originally transmitted amounts and pending payment receipts. When a return is marked uncollectible, the system sends a reverse entry of the previously transmitted amounts to collect payments and distribute only the partially collected payments.
AP.1.23	System shall provide the ability to automatically calculate IFTA late- payment penalties.	No	Vendor	4-Base Product	The CMCS solution provides the ability to calculate the IFTA late-payment penalties. The CMCS business rules are configurable to calculate late filing, late payment penalties, and interest, and process refunds based on the State business rules.

AP.1.24	System shall provide the ability to run a daily MCS Division Deposit Report that includes payments for IRP, IFTA, audit, title money, and sales tax.	Yes	Vendor	4-Base Product	<text><section-header></section-header></text>
AP.1.25	System shall provide the ability to run a daily Online Payment Report that includes online payments for IRP, IFTA, audit, and sales tax.	Yes	Vendor	4-Base Product	The CMCS solution provides a range of reports in the Finance module to generate online payment reports to include payments for IRP, IFTA, audit, and sales tax filtered by location, duration, and user ID.
AP.1.26	System shall send an automatic email alert to the NE DMV Administrator in the event of NSF over \$500 unpaid after 10 days.	No	Vendor	3- Custom	The CMCS solution includes a batch job that helps to generate the report for invoiced transactions amounting to more than \$500 and due for more than 10 Days. We will modify the system to send an automatic email alert to the NE DMV Administrator in case of such an event.

ACCOUNTING & PAYMENT PROCESSING COMPLETE

Requirements Traceability Matrix for Option 1: (MMCIS and a document management system)				
Collections (CL)				
Requirements	Bidder Response Section			

REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation
CL.1	General				
CL.1.1	System shall provide a collections workflow with the ability to see and track collection actions and documents in the collection process.	No	Vendor	4-Base Product	The CMCS solution allows uploading documents for the preferred module in the application. Users can view the document using the Inquiry functionality and click the Document number to access the document.
CL.1.2	System shall identify accounts eligible for collections based on NE DMV business rules (i.e., audit balances unpaid, multiple non-filers, large balance due (over \$500), and NSF payment).	No	Vendor	4-Base Product	During the requirements gathering session, we will understand and document the NE DMV business rules to meet this requirement.
CL.1.3	System shall provide a process to generate a BIA (Best Information Available) assessment and produce an assessment letter for non-filers based on NE DMV business rules.	No	Vendor	4-Base Product	The CMCS solution generates the assessment letters through a nightly run batch process. We will modify the system to accommodate the NE DMV business rules for producing the BIA assessment letters.
CL.1.4	System shall provide inspection data from the MMCIS for individual MC Customers on demand.	No	Vendor	4-Base Product	The CMCS provides inspection data for individual customers on-demand through its Customer Inquiry functionality.
CL.1.5	System shall provide the ability for authorized NE DMV Users to flag an MC Customer on which a lien is being filed, produce the lien document, and enter notes related to the lien.	No	Vendor	3- Custom	The CMCS solution provides the ability to flag a customer for various purposes. We will modify the system to flag a customer on which a lien is being filed, produce the lien document, and enter notes related to the lien.
CL.1.6	System shall provide the ability for authorized NE DMV Users to flag an MC Customer on which a levy is being filed, produce the levy document, and enter notes related to the levy.	No	Vendor	3- Custom	The CMCS solution provides the ability to flag a customer for various purposes. We will modify the system to flag a customer on which a levy is being filed, produce the levy document, and enter notes related to the levy.

CL.1.7	System shall allow for the entry of notes and uploading of correspondence documents to record interactions with MC Customers in collections.	No	Vendor	4-Base Product	The CMCS solution allows users to enter comments and upload documents for various transactions and information updates such as account, fleet, vehicle, billing, etc. Users can select the document scan options (Scan Now and Scan Later) to scan and upload the required documents via the CTS-Doc interface.
CL.1.8	System shall allow for a payment plan to be set up for audits only, with system generated monthly invoices.	No	Vendor	3- Custom	The CMCS provides the functionality of the payment plan. We will modify the system to set up a payment plan for audits only, with system-generated monthly invoices.

COLLECTIONS COMPLETE

Requirements Traceability Matrix for Option 1: (MMCIS and a document management system) Audit (AU)							
Requirements			Bidder Response Section				
REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation		
AU.1	J.1 General/Core						
AU.1.1	System shall provide ability to conduct an IRP only, IFTA only, or combined IRP and IFTA audit at the MC Customer level.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to conduct audit selection sampling for IFTA and IRP individually. The system utilizes the sampling to process IFTA, and IRP audits individually. The system allows the processing of a combined payment and generates a combined IFTA/IRP audit invoice report via the Reprint functionality.		
AU.2	IFTA Audits				Click here to enter text.		

AU.2.1	System shall provide the ability to lock down past returns for the period under audit (e.g. If an audit is being performed for 3rd Qtr., 2019 through 2nd Qtr., 2020, changes to these returns will not be allowed).	Yes	Vendor	4-Base Product	The CMCS IFTA solution allows the locking of given returns for tax amendment or correction once the audit is begun. The system supports audits on previously audited returns only.
AU.2.2	System shall transmit IFTA audit dollars per IFTA Option 2. (https://www.iftach.org/manuals/2022/A A/Articles%20of%20Agreement%20-%201- 2022.pdf)	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to transmit the audit tax return data to the Clearinghouse as per IFTA Option 2.
AU.2.3	System shall display and print quarterly reported IFTA return information for an MC Customer over a customizable range of time.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to view the quarterly reported IFTA information for a preferred duration through Tax Return and Audit Inquiry functionalities. Users can generate or reprint audit invoices and tax return invoices via the Reprint functionality.
AU.2.4	System shall display and print information for all active IFTA MC Customers within a county or counties.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the "Carrier List Report" functionality to display and generate an active carrier list for IFTA customers.
AU.2.5	System shall display and print, by year, a list of all decals issued to an individual MC Customer that includes issue date and serial number for all included decals.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to generate a list of all issued decals to a customer via the "Decal Issued Report". This report can be filtered by date range or decal year to include the issued date and the range of issued decal numbers.
AU.2.6	System shall provide the capability to produce, by quarter, reports for all MC Customers that have reported taxable and tax-paid gallons to be equal for each jurisdiction.	Yes	Vendor	4-Base Product	The CMCS IFTA solution provides the ability to generate a list of customers that have reported taxable gallons and tax-paid gallons to be equal for all jurisdictions via the "Tax Paid Gallons Report". This report can be filtered based on the year and quarter.
AU.2.7	System shall generate a list of MC Customers, by descending number of IFTA miles for the first three (3) quarters of the year requested. IFTA requires that certain percentages of	Yes	Vendor	4-Base Product	The CMCS IFTA provides the ability to generate a list of customers in descending order by mile and percentage of the high, medium, and slow rank via the "Audit Stratification Report" for the year and quarter.

	audits must be conducted on high, medium, and low mileage accounts.							
AU.3	IFTA/IRP Combined Audits							
AU.3.1	System may allow MC Customers and reporting services to upload audit records via their online account. This functionality is not required, but desired.	No	Vendor	4-Base Product	The CMCS solution provides a self-service portal for external customers and reporting services/service providers to upload audit return records.			
AU.3.2	System shall provide audit tracking functionality, including assigning audit quarters and IRP years to NE DMV Users by MC Customers. This includes the tracking of scheduled, active, assessed, final, budgeted hours, and actual hours, at a minimum.	Yes	Vendor	4-Base Product	The CMCS solution provides an audit tracking module that tracks the entire end-to-end audit process. It allows assigning audits to the auditors, sending the audit letter of intent to the carriers, updating the fieldwork, and generating letters such as "Notice of Proposed Audit," "Notice of Audit Assessment," etc. The auditors can send the audit record to the supervisor for approval. The carrier may petition the Audit Supervisor or Audit Administrator to reconsider the audit and waive the penalty. The auditors can log and track their audit hours in the system.			
AU.3.3	System shall allow export of information to be used with Nebraska's third-party audit software (currently DB Software) (i.e., MC Customer account information, reported IFTA/IRP information, IRP fees paid, and unit information, etc.).	Yes	Vendor	4-Base Product	The CMCS solution provides the Audit Download functionality for IFTA and IRP that produces a CVS file containing the supplement and tax return information. The information from the downloaded files can be exported to Nebraska's third-party audit software (or DB Software).			
AU.3.4	System shall provide the capability to import audit result files from third-party audit software (currently DB Software).	No	Vendor	3- Custom	During the requirement gathering session, we will understand and document the NE DMV's audit result file import from third- party audit software requirement and configure the system to meet the requirement.			
AU.3.5	System shall provide the ability to combine IRP and IFTA audit invoices when both audits are being performed at the same time.	No	Vendor	4-Base Product	The CMCS solution allows users to perform audit processing on IFTA and IRP individually but add both invoices to a single cart and process the payment. The system can generate a combined IFTA/IRP invoice report via reprint functionality.			
AU.3.6	System shall provide the ability to process a refund if the audit results in an overall net credit balance.	Yes	Vendor	4-Base Product	The CMCS IFTA Finance module auto-calculates and creates refunds as a part of the audit return processing.			
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AU.3.7	System shall provide the ability to generate collection letters in accordance with NE DMV business rules for unpaid audit invoices. System shall have the ability to produce a report of MC Customers who have unpaid audit invoices.	No	Vendor	4-Base Product	The CMCS IFTA solution includes a batch job called "Audit Suspension" that generates notices to carriers for unpaid audit invoices.			
AU.4	IRP Audits	1		1				
AU.4.1	System shall provide the ability to handle current year audits so that an audit billing will be calculated for the year to date, with subsequent supplements billed at the new audited mileage percentages.	Yes	Vendor	4-Base Product	The CMCS IRP solution allows users to perform audits on the current year's registration and calculate fees year-to-date. Once an audit is processed for the current year's registration, the system utilizes the audited mileage percentages to process and calculate fees for the subsequent supplements.			
AU.4.2	System shall calculate 100% fees for identified vehicles in a designated jurisdiction that are determined to be non-apportionable vehicles by an audit. System shall also allow removal of fees from fleet when this calculation has been completed so fleet adjustments don't affect the fees from these vehicles.	No	Vendor	3- Custom	The CMCS solution provides the Error Correction Undo Vehicle supplement to create a new intrastate fleet for the identified vehicle. The system calculates 100% fees for the vehicles identified as non-apportionable. The CMCS Error Correction Undo Vehicle supplement allows the revocation of all fees from the system. The system will be modified to allow the Error Correction Undo Vehicle functionality to perform multiple supplements on an identified vehicle.			
AU.4.3	System shall support adding an unreported jurisdiction and calculating appropriate fees.	No	Vendor	4-Base Product	The CMCS Error Correction (do-distance) supplement allows adding the mileage for an unreported jurisdiction and calculating fees appropriately.			
AU.4.4	System shall support removing a reported jurisdiction and calculating the appropriate refund.	No	Vendor	4-Base Product	The CMCS solution allows the removal of mileage for a reported jurisdiction and calculates the refund as per the jurisdiction fee rules.			

AU.4.5	System shall provide the ability to change reported distance from actual distance to the AVDC distance, and the ability to change the reported distance from the AVDC distance to actual distance.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to change the distance from "Actual to AVDC" and vice versa at the time of processing an audit.
AU.4.6	System shall track the number of inadequate audits and what percentage penalty was assessed on each audit.	Yes	Vendor	4-Base Product	The CMCS solution provides the Audit Inquiry functionality to view the audit history as well as the penalty charged for a given audit.
AU.4.7	When an inadequate current year audit is posted, system shall include the increased percentage in all subsequent IRP invoices.	Yes	Vendor	4-Base Product	The CMCS solution allows including the increased or decreased mileage percentage in all subsequent invoices after an IRP audit payment is completed.
AU.4.8	System shall support the issuance of audit results to MC Customers, including audit tracking for appropriate appeal periods. Appeal periods shall be configurable. The current appeal periods are 30 days for MC Customers and 45 days for jurisdictions.	No	Vendor	3- Custom	The CMCS solution provides support to issue audit results to the customer. To meet this requirement, we will modify the system to accommodate the appeal period details in the audit invoice summary.
AU.4.9	System shall support the netting of audit results.	Yes	Vendor	4-Base Product	The Clearinghouse netting process determines payments to jurisdictions.
AU.4.10	System shall provide the ability to print and extract a list of power units that were active over a customizable date range for a specific MC Customer.	Yes	Vendor	4-Base Product	The CMCS solution provides the Ad Hoc SQL report functionality to query an SQL to extract a list of active power units for a given date range and a customer.
AU.4.11	System shall provide the ability to print and extract a report listing the original IRP miles and percent by jurisdiction and registration year.	Yes	Vendor	4-Base Product	The CMCS solution allows for generating an audit invoice report containing the original and audited miles and percentages for the user to verify the fees and mileage difference.

		1	1	1	IDD Inviediction Audit Panort/Ease
					IRP Jurisdiction Audit Report/Fees IRP Jurisdiction Audit Report/Fees Registrant Address: AND/ERSON NED -
AU.4.12	System shall provide the ability to print and extract a report listing the original	Yes	Vendor	4-Base Product	Total 200,000 \$11,803.37 300,000 99,99900 \$12,442.16 \$1000 \$00.00 \$556.76 Note: (21) Find Year Estimated Indequals Records Assessment Perceit is greater than 0% if datance records are considered inadequale for audit. Page 1 of 1 The CMCS solution allows for generating original supplement invoices containing original miles and fees calculated. Once an audit supplement is performed, the system prints the audited
	invoice, and each supplement, by registration year.				miles in the audit invoice and all subsequent supplements.

AUDIT COMPLETE

	Requirements Traceability Matrix for Option 1: (MMCIS and a document management system) Permits (PT)									
Requirements					Bidder Response Section					
REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation					
PT.1	PT.1 Prorate (Trip) & Fuel Permits									
PT.1.1	System shall provide the ability to purchase a temporary 72-hour permit without having an active system account.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to issue a temporary permit through the Self-Issue Permit module. This module allows users to obtain permits without logging into the system. The existing users can log into the system to obtain temporary permits.					
PT.1.2	No password or user ID will be required to access the permit system.	Yes	Vendor	4-Base Product	The CMCS solution provides the ability to issue a temporary permit through the Self-Issue Permit module that allows users to obtain permits without having to set up credentials to access					

the system. Users will need to provide their USDOT number to issue the trip permits.

Below is a sample screen of the Self-Issued Permit module:
Welcome to CRS Application This is BOTrunk environment
 ▲ User ID ▲ Password
First time user? Email Construction with your Construction (if known), USDOT number (if known) and the name used for your commercial credentials. We will also need the name and email address of each individual who will have access to your account.
Log in Permits Only Log in
To access only the temporary registration permits module, you must have an active USDOT number established in our system and an active Motor Carrier account number.
Don't have User Id and Password? Eorgot Password?
A F20021 (10) Temperary Beginnenin News nay in an anne Marin Statu S Afrika subaras Welcome to the Adabo Temperary Reginzation Permit module Self Issuel Permit Contense Search Self Temperary Beginnenin News nay in an anne Marin Search Self Temperary Beginnenin News nay in an anne Marin Search Self Temperary Beginnenin News nay in an anne Marin Search Self Temperary Beginnenin News nay in an anne Marin Search Self Temperary Beginnenin News nay in an anne Marin Search Search Search S
Upon providing the USDOT number and processing from the

					Self-Issued Permit screen, the system redirects the user to the Trip Permit details screen to capture the required details to issue the trip permit and collect fees online.
PT.1.3	Customer shall be able to access permit info by plate, VIN, and permit number while permit is active.	No	Vendor	4-Base Product	The CMCS solution provides the Permit Inquiry functionality for users to access and view the issued permit details by entering various search parameters such as Permit No., Permit Type, Permit Year, Legal Name, Unit No., etc.
					Below is a sample screen of the CMCS Permit Inquiry:
					in the system if required.
PT.1.4	Necessary edits in the application process to be determined (i.e., If DOT number is OOS).	Yes	Vendor	3- Custom	The CMCS will be modified to validate with the CVIEW system to check OOS USDOT.
PT.1.5	System shall track all permits issued and make data available to NE DMV Users.	Yes	Vendor	4-Base Product	The CMCS solution provides the Permit Report functionality to track the issued permits and make the data available for authorized users.

					Below is a sample screen of the CMCS Permit Report: Issued From Date: 08/28/2021 Issued To Date: 11/18/2022 Issued To Date: 11/18/2022 Issued To Date: 11/18/2024 Issued To Date: 11/18/2024 Issued To Date: 11/18/2024 Hindwritten Permit No. Feemit No. Hindwritten Permit No.	
					OTA - OFF LOAD TRAVEL AUTHORIZATION PERMIT Permit No. User ID Issued Date Handwritten Permit No. Fees OTA087258421 TMILLER 09/21/2021 HW1740 \$50.00 Sum of Permits Issued: \$50.00 No. of Permits Issued: \$1	
					SVT - SINGLE VEHICLE PERMIT	
					Permit No. User ID Issued Date Handwritten Permit No. Fees SVT087367421 JHOLVERSON 09/28/2021 HV/197284 \$60.00 SVT087344121 AGREEN 09/27/2021 HW201076 \$50.00 SUT087344121 AGREEN 09/27/2021 Sum of Permits Issued: \$120.00 No. of Permits Issued: 2	
PT.1.6	System shall allow an authorized NE DMV User with access to the fees table to modify fees assessed.	Yes	Vendor	4-Base Product	The CMCS solution provides the Admin Fee module to acce and modify the assessed fees. The authorized users may increase the trip permit fee and update the effective date fo that fee if needed.	ess r
PT.1.7	System shall allow an authorized NE DMV User to edit certain fields on an issued permit.	No	Vendor	4-Base Product	The CMCS solution provides the ability to edit the fields on issued permit via the Update Permit functionality. The syste allows the users to update fields such as Unit No., VIN, Plat etc. on an issued and active permit.	an em te,
PT.1.8	System shall provide a daily trip and fuel permit report of fees collected online (NE DMV only accepts electronic forms of payment for these services).	Yes	Vendor	4-Base Product	The CMCS solution includes the Trip Permit Ledger Report meet this requirement. This report displays the fees collected through the CMCS solution.	: to ed

		Belc Rep	ow is a ort:	a samp	le scre	en of	the (СМС	CS T	rip Per	mit l	Led	ger	
		OFFICE I CLERK II PERMIT	ID: BSE D: JHUNTER TYPE: HMP				Λ-	ГС				RUN DATE	: 11/18/202;	I
		ACCOUN NO.	IT PERMIT NO.	INVOICE TRANSACTI NO. TYPE	ON PAYMENT PERMIT DATE CODE	HAZMAT	HAZWASTE	AZWASTE	FUEL W	EIGHT COMBINATION REASE VEHICLE	SINGLE	UNLADEN	OTHER TRIP PERMITS	INVOICE AMOUNT
		12004	100000000000000000000000000000000000000	COOCCO DOUT	44104100000 14840	545.00	£0.00	60.00	£0.00	£0.00 £0.00	50.00	60.00	10.00	545 00
		13024	HMD000005000	663637 DDMT	11/01/2022 PMP	\$15.00	50.00	20.00 E0.00	80.00	\$0.00 \$0.00	\$0.00	80.00	\$0.00	e15.00
		13024	PIMP090005022	00303/ RPMT	11/01/2022 HMP	\$15.00	\$0.00	\$0.00	80.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005722	003044 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005822	663645 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005922	003046 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006022	663647 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006622	663653 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006722	663654 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006822	663655 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006922	663656 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090007422	663661 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090007522	663662 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090007622	663663 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090007722	663664 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		13024	HMP090004822	663635 RPMT	11/01/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005422	663641 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005522	663642 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090005622	663643 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006122	663648 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006222	663649 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP090006322	663650 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMD090006422	663651 RPMT	11/15/2022 HMD	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMP000006522	663652 PDMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		100104	HMD000007022	663657 DDMT	11/15/2022 HMD	\$15.00	\$0.00	£0.00	\$0.00	\$0.00 \$0.00	\$0.00	80.00	80.00	E15.00
		100104	HMP050007022	663658 DDMT	11/10/2022 HMP	515.00	80.00	80.00	\$0.00	\$0.00 \$0.00	\$0.00	80.00	80.00	615.00
		100104	HMP090007122	003036 RPMT	11/10/2022 HMP	\$15.00	\$0.00	\$0.00	30.00	\$0.00 \$0.00	\$0.00	50.00	30.00	\$15.00
		100104	HMP090007222	003039 RPM1	11/15/2022 PMP	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	30.00	\$0.00	\$15.00
		100104	HMP090007322	COSCO RPMT	ANALIZZ HMP	\$15.00	\$0.00	e0.00	80.00	\$0.00 \$0.00	\$0.00	40.00	40.00	e15.00
		100104	PIMP090007822	003000 RPMT	11/10/2022 HMP	\$15.00	\$0.00	\$0.00	80.00	\$0.00 \$0.00	\$0.00	a0.00	\$0.00	\$15.00
		100104	PIMP090007922	003000 RPMT	11/15/2022 HMP	\$15.00	\$0.00	\$0.00	80.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$15.00
		ΤΟΤΑ	d.:			\$435.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$435.00
		OFFIC	CE TOTAL:			\$435.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$435.00
		GRAM	ND TOTAL:			\$435.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$435.00
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PERMITS COMPLETE

	Requirements Traceability Matrix for Option 1: (MMCIS and a document management system) ITD (TD)								
Requirements					Bidder Response Section				
REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation				
TD.1	General								
TD.1.1	System shall automatically upload SAFER files T0019 daily or more often.	Yes	Vendor	4-Base Product	The CVIEW solution interfaces with the IFTA application to import daily IFTA data from T0019 (IFTA License) files. The CVIEW solution provides a daily scheduled batch process that automatically uploads this data to the SAFER.				
					The Schedule of batch process can be scheduled as required by NE DMV.				

TD.1.2	System shall fully support and satisfy all PRISM and ITD requirements to maintain Nebraska's compliance.	Yes	Vendor	4-Base Product	The CVIEW solution is compliant with the most recent version of the CVISN/ITD and PRISM architecture as defined by FMCSA.
TD.1.3	System shall generate PRISM letters on demand for carriers OOS.	No	Vendor	4-Base Product	The CMCS PRISM Suspension/Denial Report provides both a detailed and a summary report with federal out-of-service order reasons. The system provides a Vehicle Safety batch process that generates the PRISM vehicle suspension notice.
TD.1.4	System shall provide PRISM override capability for authorized NE DMV Users.	Yes	Vendor	4-Base Product	The CMCS solution provides a supervisory override for PRISM edits. The supervisor must provide credentials and an override reason to execute the override. All overrides are logged in the user activity table for an audit trail.
TD.1.5	System shall provide the ability to conduct a real time web service call to SAFER.	No	Vendor	4-Base Product	The CVIEW solution interfaces with SAFER and PRISM services for real-time data inquiry.
TD.1.6	System shall download SAFER transactions including but not limited to: IFTA License (T0025) IRP Account (T0026) IRP fleet (T0027) IRP Vehicle (T0028) IRP Delete Vehicle (T0028D) MCMIS (T0031) L & I (T0032) Inspection data (T0033) UCR (T0034) PRISM targeted vehicles/carrier files	Yes	Vendor	4-Base Product	 The CVIEW solution downloads and updates the following transaction data from SAFER: IFTA License Information (T0025) IRP Account Information (T0026) IRP Fleet Information (T0027) IRP Vehicle Information (T0028) IRP Vehicle Delete Information (T0030) Vehicle Inspection Information (T0030) MCMIS Safety and Census Information (T0031) License and Insurance Information (T0033) PRISM Targeted Vehicle Information (T0041) PRISM Targeted Carrier Information (T0042)
TD.1.7	System shall create a CVIEW snapshot that combines safety information with IRP, IFTA information, and plate types provided by the NE DMV.	Yes	Vendor	4-Base Product	The CVIEW solution includes CVIEWNow Inquiry that enables authorized users to retrieve all applicable Safety, IRP, and IFTA information. Below is a sample screen of the CMCS CVIEWNow Inquiry screen displaying the appropriate grouping of data, including IRP and IFTA Credentials, and Vehicle information.

					CVEWING Image: Control (Control (Cont))))))))))))))))))))))))))))))))))))
TD.1.8	System shall be able to search CVIEW with these criteria: • DOT number • Plate number and state of origin • Whole and partial VIN	Yes	Vendor	4-Base Product	The CVIEW solution includes the CVIEWNow Inquiry functionality that allows processing CVIEW search using the following search parameters: • Carrier USDOT • TIN • Carrier Name • VIN • Plate Number • Jurisdiction • Vehicle USDOT • Permit Number • DBA Name Below is a sample search screen of CMCS CVIEWNow Inquiry:
TD.1.9	System shall provide authorized NE DMV Users the ability to confirm that all files sent to SAFER were successfully received. Including files that were sent to SAFER via the IDR.	Yes	Vendor	4-Base Product	 The CVIEW Log Dashboard provides the following information to the authorized users: Status of T0019 – T0022 files loaded in the CVIEW System Status of T0019 – T0022 files exported to the SAFER

 TD.1.10 System shall provide authorized NE DMV Users the ability to confirm that records sent to SAFER match the records in the SAFER database. System shall include records that were sent to SAFER via the IDR. Yes Yes Yes Vendor 4-Base Product The CVIEW Log Dashboard provides the following information to the authorized users: Status of T0019 – T0022 files loaded in the CVIEW System Status of T0019 – T0022 files loaded from SAFER/PRISM Status of T0041 – T0042 files loaded from SAFER/PRISM Status of T0041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – T0042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Status of to041 – to042 files loaded from SAFER/PRISM Statu						The CVIEW solution receives the SAFER logs, which include the number of files, the count of data received vs. applied in each file.
	TD.1.10	System shall provide authorized NE DMV Users the ability to confirm that records sent to SAFER match the records in the SAFER database. System shall include records that were sent to SAFER via the IDR.	Yes	Vendor	4-Base Product	The CVIEW Log Dashboard provides the following information to the authorized users: Status of T0019 – T0022 files loaded in the CVIEW System Status of T0019 – T0022 files exported to the SAFER Status of T0025 – T0034 files loaded from SAFER/PRISM Status of T0041 – T0042 files loaded from SAFER/PRISM The system allows users to select the transaction type and drill down to view the files with counts of data processed. Below is a sample screen of Log Dashboard details for CVIEW Import. VIENTIAL DETAILS VIENTIAL DETAILS <

ITD COMPLETE

Requirements Traceability Matrix for Option 1: (MMCIS and a document management system)
Technical (T)

Requirements				Bidder Response Section			
REQ#	Requirement Description	Current Env.	Vendor or Sub	Delivery Method	Explanation		
T.1	General						
T.1.1	The contractor is required to abide by, and comply with, all rules and regulations as set forth by the Nebraska Information Technology Commission (NITC). <u>https://nitc.nebraska.gov/standards/ind</u> <u>ex.html</u>	Yes	Vendor	3- Custom	After the RTM is finalized, we will work with the NE DMV's business area experts to go through our CMCS solution step- by-step and screen-by-screen, documenting any necessary configuration changes and modifications required to meet the NE DMV's requirements. The result of this activity will be a deliverable called the CMCS Product Verification Document (PVD). The PVD will provide the design criteria needed for the development team to make the necessary configurations and customizations to the solution. While the PVD analysis and documentation are being performed, we will work with the NE DMV IT experts to identify and document the required interfaces in the Interface Control Document (ICD) to define exactly how we will interface with both internal and external systems. The CMCS solution has been developed using a Universal Interface Controller (or UIC) that acts as an intermediary between the external systems and the application programs to minimize the need for program changes due to external system changes. When external systems change, the UIC will be changed, eliminating the need to make application program code changes.		

1					
					wireframes/screens, business rules, workflows, interface functional requirements, report specs, etc.
					Celtic's proposed system will function in conformance with NE DMV Business Rules. Celtic will configure business rules provided by NE DMV in the system, and those rules will be validated as part of User acceptance testing. Our rules engine will have the capability to transform legislation and policy regulations into executable and maintainable transactions. This will empower policy owners to assess the impact of new and existing policies while achieving consistency across all delivery channels. Business units will be able to provide detailed decision reporting to understand how decisions are reached and enforce compliance requirements.
T.1.2	The proposed system shall run internally on the State of Nebraska Network.	Yes	Vendor	4-Base Product	Celtic understands and will fully comply with the requirement that the solution will run internally on the State of Nebraska Network.
T.1.3	The contractor shall work with vendors, stakeholders, and NE DMV to develop interfaces as defined in the Interface Catalog.	Yes	Vendor	3- Custom	As mentioned in T.1.1, while the PVD analysis and documentation are being performed, we will work with the NE DMV IT experts to identify and document the required interfaces in the Interface Control Document (ICD) to define exactly how we will interface with both internal and external systems.
T.1.4	System shall run on a Microsoft Windows platform (stack), including Windows OS, SQL Server.	No	Vendor	4-Base Product	We have built our CMCS solution in both a Java and .Net structure and have chosen our current version of .Net and SQL Server database for this engagement. The system will be hosted over IIS on the Windows Server.
T.1.5	System shall run on VMware 7.	No	Vendor	4-Base Product	The CMCS application is fully compatible with VMWare 7.
T.1.6	System shall have the capability to run the application in a load balanced	No	Vendor	4-Base Product	Celtic understands that and will provide support for the high volume of requests the application needs to be run in load balanced environment. The CMCS has been installed in a

	environment. SQL Servers shall run on physical machines.				load-balanced environment for almost all of our Jurisdictions. In addition, the SQL Server database is used in our major implementations.
T.1.7	System shall comply fully with and support all standards for IRP and IFTA agreements.	Yes	Vendor	4-Base Product	CMCS is fully compliant with all the standards of IRP and IFTA and is being successfully used by multiple jurisdictions.
T.1.8	All online payments made by external users shall be processed by Nebraska Interactive (.gov). Contractor will work with Nebraska Interactive on this interface.	Yes	Vendor	3- Custom	Celtic understands and will comply with the integration and interfacing requirements of NE DMV. We will work with Nebraska interactive to ensure all payments processed by external users are processed by Nebraska Interactive (.gov).
T.1.9	System shall be open and non- proprietary where possible, providing options available without additional costs outside of contract terms (third- party software components).	Yes	Vendor	3- Custom	Celtic is the sole developer of the configurable and customizable CMCS Solution. Our solution includes a license of third-party software components to generate standard reports, barcodes, and document scanning.
T.1.10	System shall provide the ability for designated NE DMV employees with appropriate access rights to manage, maintain, and administer all aspects of the NE DMV's IRP/IFTA Solution (such as system controls, operational parameters, system tables, etc.) via a web-based IRP/IFTA system administration and management portal effectively and efficiently.	Yes	Vendor	4-Base Product	CMCS is a browser-based, role-based system that allows users to access functionalities depending on the role they are assigned within the system. COTS in-built RBAC (Role-Based Access Control) authorizes users to seek the information at Navigation Tab Level, Page- level, and Field level. The CMCS User Management module accommodates the creation of user roles by assigning full or limited access to each user role for customers, third-party agents, authorized users, other designated departments, and local users, allowing them
					to manage, maintain and administer various aspects of the NE DMV's IRP/IFTA solution.
T.1.11	All users shall have the ability to access the system across multiple platforms, including mobile access. (i.e., system shall be accessible via MAC/PC and on industry standard browsers) • Google Chrome	No	Vendor	4-Base Product	CMCS is a browser-based application that consists of a modernized responsive interface that adapts to desktop, or handheld devices. CMCS shall be accessed and compatible with standard browsers like Google Chrome, Microsoft Edge, Mozilla Firefox, and Apple Safari.

	 Microsoft Edge Apple Safari Mozilla Firefox 				
T.1.12	System shall allow for entry of data or completion of transactions using network attached devices, mobile devices, etc. (Bidder shall provide list of acceptable devices.)	Yes	Vendor	4-Base Product	CMCS is built on the Responsive Design framework. This allows the product to work seamlessly across all devices including desktops, laptops, tablets, and mobile devices as well as standard browsers.
T.1.13	System shall allow for access to online services through a mobile device such as a smart phone or tablet and be rendered correctly for the device being used.	Yes	Vendor	4-Base Product	CMCS is built on the Responsive Design framework. This allows the product to work seamlessly across devices including tablets and mobile devices.
T.1.14	System shall have a uniform look and feel throughout all applications (i.e., similar color scheme, table/form layout, button placement, function keys, shortcuts, etc.).	Yes	Vendor	4-Base Product	CMCS is built on the Responsive Design framework ensuring a consistent user interface and user experience while accommodating itself to various devices.
T.1.15	System shall have the ability to restrict service availability by user type (i.e., an NE DMV administrator can see administration functions while standard NE DMV Users cannot, etc.).	Yes	Vendor	4-Base Product	As stated in T.1.10, CMCS is a browser-based and role-based system that provides complete or limited access to all functionalities depending on the role assigned to a user. For example, an authorized NE DMV user will have access to all functionalities (including access to view and manage data of all users and customers) within the system whereas an external NE DMV user will only be able to access their customer data and process supplements relevant to their role.
T.1.16	 System shall provide: Development (DEV), Test (UAT/Staging) and Production environments. The capability to generate test data with the same attributes of 	No	Vendor	4-Base Product	Generally, CMCS is deployed on different environments such as Development, QA, Sandbox, UAT/Staging, and Production. The production data can easily be recreated in the test region and is done to test complex scenarios before a change is deployed in the production environment.

	production data. Once configured, test data shall be a duplicate of the production data, updated within one week of actual live production data.				We will migrate the production data to the test region per our discussion and the requirement of NE DMV.
T.1.17	UAT/Staging environment shall be available to NE DMV 90 days prior to deployment to allow a proper testing platform.	N/A	Vendor	4-Base Product	Celtic understands and will comply with NE DMV's requirement to make the UAT/Staging environment available 90 days prior to the deployment for testing purposes.
T.1.18	System shall assign a set of unique, searchable identifiers for each transaction, to be determined by NE DMV and contractor.	Yes	Vendor	4-Base Product	Each transaction in CMCS provides a unique set of search parameters based on the relevance of the transaction. During the requirements gathering session, Celtic will understand and document the searchable identifiers for each transaction in accordance with NE DMV requirements.
T.1.19	System shall utilize web services to construct interfaces and for module-to- module communication. Batch interfaces should only be used in instances where the solution does not support web services or as a backup to web services.	Yes	Vendor	4-Base Product	CMCS is built on the Service Oriented Architecture. Each application (e.g. Enterprise, IRP, IFTA, etc.) is deployed separately to communicate with each other through REST API.
T.1.20	System shall comply with all applicable ANSI D20 standards (Data Element Dictionary for Traffic Records Systems).	Yes	Vendor	3- Custom	During the requirement gathering sessions, we will understand and document NE DMV's requirements and configure the system to comply with all applicable ANSI D20 standards.
T.1.21	System shall comply with and utilize all applicable NCIC codes. <u>https://www.ojp.gov/ncjrs/virtual-</u> <u>library/abstracts/national-crime-</u> <u>information-center-ncic-code-manual-</u> <u>second-edition</u>	Yes	Vendor	3- Custom	During the requirement gathering sessions, we will understand and document NE DMV's requirements and configure the system to comply with and utilize the applicable NCIC codes.
T.1.22	System shall have the ability to export data to utilize XML-based standards, delimited file format, fixed file format, and custom transaction formats for	Yes	Vendor	3- Custom	Celtic understands and will comply with the integration and interfacing details mentioned in this section.

	communication and integration with other environments and applications.				
T.1.23	System shall provide diagnostic information to the NE DMV support team on the type and source of system errors.	No	Vendor	4-Base Product	 The CMCS solution provides the Client Support module consisting of functionalities that allow viewing application logs, exception logs, and error screenshots. The Exception Logs functionality captures and stores all exceptions while automatically uploading them to the system exception logs repository.
T.1.24	System shall report performance metrics for use in capacity provisioning and diagnostics.	No	Vendor	4-Base Product	The proposed CMCS solution is already deployed in multiple jurisdictions across the US and Canada and is compliant with industry-standard performance parameters. However, we will perform Performance testing of the customized product to verify that the CMCS solution is meeting the performance standards according to NE DMV requirements. Performance testing will be planned before Go-Live during the Pilot testing phase.
					Performance testing will be done for in-scope applications and modules. It includes Load, Stress, Endurance, and Volume testing. Performance Scripts will be developed in a dedicated integrated or Pre-production environment, and the same will be used for execution in the respective environment. A production copy of the data will be loaded into the database prior to performance testing in the pre-production environment.
					Business-critical transactions, as well as high-volume transactions, will be identified for performance testing based on the criteria below: Peak hour user load Average hour user load Peak hour transaction volumes Average hour transaction volumes Future volume forecast User concurrency Segregation of external user load

			-		
					 Types of Performance Testing considered in scope: Load Test: To validate the performance when applied to peak load. Stress Test: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks. Endurance Test: To validate performance when applied to peak load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc. Transactions in scope are a mix of End-to-End scenarios (this may include web services) and a few background batches. Based on our understanding, 10% of the transaction flows have been considered for performance testing along with background batch scenarios. We assume that the Production copy of data will be loaded into the database prior to performance testing in the pre-production environment by the
					NE DMV team. Performance testing will be carried out to emulate a production-like scenario where OLTP and batch processes will be executed. Also, the load will be distributed in accordance with the Non-Functional Requirements (NFR) that were provided to simulate the number of transactions and the user load. Based on non-functional requirements, a workload will be designed.
T.1.25	System shall provide the ability to validate a postal address against the USPS database.	No	Vendor	4-Base Product	The CMCS solution provides flexible, external interfacing capabilities to accommodate USPS address validation to validate the physical location address as a residency/established place of business in Nebraska.
T.1.26	System shall auto-populate data and provide default values where applicable and available.	No	Vendor	4-Base Product	Celtic understands this requirement well. The CMCS application already comprises the feature to auto-populate data and default values wherever applicable.

T.1.27	System shall limit document uploads to a file size agreed upon by NE DMV and contractor.	No	Vendor	3- Custom	The CMCS solution provides the capability to limit document uploads to a predefined file size. We will configure the system to update the file size in accordance with NE DMV.
T.2	Systems Administration Roles and Re	sponsibili	ties		
T.2.1	 NE DMV will provide the software and hardware necessary to implement the proposed solution. The solution will run on the following versions of the software, or higher. VMware 7 (DMV installed and maintained) Windows Server 2019 (DMV installed and maintained) SQL Server 2017 or higher (Vendor installed and maintained) SSRS Server 2017 or higher (Vendor installed and maintained) Windows 10 (DMV installed and maintained) 	Yes	Vendor	4-Base Product	Celtic understands and will comply with the requirements. The CMCS Solution is compatible with the NE hosting environment, current software versions, and other technologies specified in the requirement.
T.2.2	Contractor shall be responsible for installation of components and updates to run their solution on NE DMV equipment that is not installed by the NE DMV.	Yes	Vendor	4-Base Product	Celtic agrees to provide the installation of components and updates to the components on NE DMV equipment.
T.2.3	Contractor shall be responsible for setting up backup short term schedules for all databases for (local) storage and easy accessibility. These backups will be on flash (attached) storage maintained by the State of Nebraska.	No	Vendor	3- Custom	Celtic agrees to comply with this requirement. We often provide a daily differential backup and a complete weekly backup at the minimum, along with an off-site storage facility.
Т.2.4	Contractor shall be responsible for the database maintenance, security, and installation of all cumulative updates for SQL Servers.	No	Vendor	3- Custom	Celtic agrees to the database maintenance, security, and installation of all cumulative updates to SQL Servers. Celtic will apply patches for all security vulnerabilities within thirty (30) days of the receipt of a vulnerability notification and

					comply with all regular system security patching requirements. For security patches related to hardware and operation systems, we expect the NE DMV Infrastructure team to provide us with updates on risk assessment.
T.2.5	NE DMV will provide long term backup/Disaster Recovery in the State of Nebraska Commvault environment.	No	Vendor	3- Custom	Celtic employs an SQL Server data replication approach to the online backup with nightly backups and off-site storage. This online and offline backup will be used to restore the application database in the event of a system crash that destroys the database. The tools we utilize for this process include standard SQL Server management studio and backup recovery software provided by Microsoft.
T.2.6	NE DMV will be responsible for malware and virus detection on servers, e-mail, and gateways.	No	Vendor	3- Custom	Celtic will work with NE DMV to establish the necessary policies and procedures required for malware and virus detection on servers, email, and gateways and comply with them as necessary.
T.2.7	NE DMV will be responsible for server operating system security patches unless a different arrangement is agreed upon separately with the contractor.	No	Vendor	3- Custom	Celtic will work with NE DMV to establish the necessary policies and procedures required for server operating system security patches and comply with them as necessary.
T.2.8	NE DMV will be responsible for Active Directory/Directory Services and authentication, as well as security group administration, mailbox distribution groups, service accounts, etc.	No	Vendor	3- Custom	Celtic will work with NE DMV to establish the necessary policies and procedures required for Active Directory/Directory Services and authentication, as well as security group administration, mailbox distribution groups, and service accounts, and comply with them as necessary.
T.2.9	NE DMV will be responsible for penetration testing up to the point of the solution. Penetration testing internal to the solution shall be conducted by the contractor.	No	Vendor	3- Custom	Celtic will work with NE DMV to design and deliver a comprehensive security test plan, test cases, test scripts, and documentation for comprehensive test management and test strategy for NE DMV.
T.2.10	The Nebraska DMV will provide remote access to the servers for the contractor based on the NITC standards.	No	Vendor	3- Custom	Celtic will follow the standard mentioned in this link https://nitc.nebraska.gov/standards/8-301.pdf.
T.3	Software				

T.3.1	Supported databases shall be limited to Microsoft SQL Server 2017 or newer. The contractor must adhere to database standards established by the Nebraska OCIO Systems Database Group.	No	Vendor	3- Custom	The CMCS solution supports Microsoft SQL Server 2017 and higher while adhering to the database standards established by NE OCIO Systems Database Group.
T.3.2	System shall operate in a clustered environment and run in an "Always On" availability group.	No	Vendor	4-Base Product	The CMCS solution is capable of being run on a clustered environment and in an "Always On" availability group.
T.3.3	Contractor shall provide a detailed component list of all software used in their proposed solution. NE DMV shall not be responsible for costs associated with these software components.	No	Vendor	4-Base Product	Celtic maintains and updates the software used in the application and their corresponding versions component-wise.
T.3.4	 System shall have an ongoing software development lifecycle plan which will be shared with NE DMV at least 1 year in advance. System shall have a monthly ongoing software development lifecycle. System shall have a weekly ongoing software development lifecycle. 	No	Vendor	4-Base Product	Celtic has an established software development lifecycle plan to manage the planning and development of iterations. We will share the software development lifecycle plan with NE DMV as per the requirement.
T.3.5	As this is a State of Nebraska hosted system, the contractor must understand and acknowledge that NE DMV will make state teammates with necessary access available to the contractor to install commercially available software.	No	Vendor	4-Base Product	Celtic will work with NE DMV to establish the necessary policies and procedures required and comply as necessary.

T.4	Support / SLA				
T.4.1	Bidder agrees to all requirements stated in the service level agreement on pages 57-61 of this RFP.	No	Vendor	4-Base Product	Celtic will work with NE to establish the necessary policies and procedures required and comply as necessary.
T.4.2	System shall be available no less than 99.9% of the time as measured monthly.	Yes	Vendor	4-Base Product	Our CMCS solution will leverage the deployment of the application in an on On-Premises environment. The application will be deployed in a High Availability Clustered environment with No Single Point of Failure. The CMCS Solution will meet 99.9% availability provided the underlying Infrastructure provided by the NE DMV data center will not have any single point of failure and availability SLA of 99.9%.
Т.4.3	System shall be supported 24 hours a day, 365 days a year.	Yes	Vendor	4-Base Product	CMCS is capable of scaling out and scaling up using additional Infrastructure provisioning. Planned Outages will include any OS patches or Product fix pack releases. Celtic will follow a strong change management process to deploy these changes in the Production environment. Patches are generally applied during Off hours and the frequency is generally once a quarter. Celtic will need to work with NE DMV as the Application availability SLA is dependent on the underlying Infrastructure.
T.4.4	 Support response times for the application/solution shall be as follows: During business hours (Monday through Friday, excluding holidays) 6:00 a.m. CST to 6:00 p.m. CST response time shall be 15 minutes or less. During non-business hours (including holidays) response times shall be 1 hour or less. 	Yes	Vendor	4-Base Product	Celtic will provide a call-in number to call when high-priority items are encountered outside of normal working hours that require immediate assistance. Celtic is committed to providing the jurisdiction with the best in industry service. To ensure this service, Celtic will provide multiple emergency contact numbers to use in case of emergency. This will ensure that emergency support is available to NE DMV even outside normal business hours.
T.4.5	Contractor shall provide the previous three (3) years of standard maintenance support schedules, including:	No	Vendor	4-Base Product	Celtic will work with NE to establish the necessary policies and procedures required and comply as necessary.

 New releases Bug fixes Version or product upgrades System maintenance Updates Security patches T.4.6 For all maintenance and support services, including all components listed in the above requirement T4.5, Contractor shall provide NE DMV with a schedule of this maintenance in advance of its implementation. NE DMV, at its discretion, can defer maintenance and prioritize support services to meet its processing schedules. T.4.7 System shall ensure efficient system processing schedules. T.4.7 System shall ensure efficient system processing schedules on more than a three (3) second response to inquiries to database Average no more than a three (3) second response to inquiries to database Average no more than a 10-second response to calculate registration fees one (1) power unit with multiple jurisdictions Less than 30 minutes to calculate the fees for the largest accounts (6,000 vehicles) E-mail a temporary registration and/or invoice in less than 1 minute once a document is available to send (C) provide notification in the event of a failure.) Documents are sent to a printer with the distabase of the largest accounts (6,000 vehicles) 				-		
T.4.6 For all maintenance and support services, including all components listed in the above requirement T.4.5, Contractor shall provide NE DMV with a schedule of this maintenance in advance of its implementation. NE DMV, at its discretion, can defer maintenance and prioritize support services to meet its processing schedules. Yes Vendor 4-Base Product Frequency of preventive maintenance work is typically scheduled on weekends and/or after normal business hours. Celtic will coordinate with NE DMV and get approval for any preventive maintenance and prioritize support services to meet its processing schedules. T.4.7 System shall ensure efficient system processing: • No more than a one (1) second wait time to display a screen • Average no more than a three (3) second response to inquiries to database • Average no more than a 10-second response to calculate registration fees one (1) power unit with multiple jurisdictions • Less than 30 minutes to calculate the fees for the largest accounts (6,000 vehicles) • E-mail a temporary registration and/or invoice in less than 1 minute once a document is available to send (Or provide notification in the event of a failure.) • Documents are sent to a printer within three (3) seconds Yes Vendor 4-Base Product For NE DMV, the CMCS solution has been sized considering 100 transactions per minute (average) with a peak number of transactions up to 600. The response time of simple transactions is in the range of 2-5 seconds. For bulk calculations, the response to inquirized software thes sone (1) power unit with multiple jurisdictions For NE DMV, the CMCS solution is equipped with optimized software the sone of the largest accounts (6,000 vehicles) • E-mail a temporary registration and/or invoice in less than 1 minute once		 New releases Bug fixes Version or product upgrades System maintenance Updates Security patches 				
T.4.7 System shall ensure efficient system processing: Yes Yes Vendor 4-Base Product For NE DMV, the CMCS solution has been sized considering 100 transactions per minute (average) with a peak number of transactions is in the range of <3 second with a medium	T.4.6	For all maintenance and support services, including all components listed in the above requirement T.4.5, Contractor shall provide NE DMV with a schedule of this maintenance in advance of its implementation. NE DMV, at its discretion, can defer maintenance and prioritize support services to meet its processing schedules.	No	Vendor	4-Base Product	Frequency of preventive maintenance work is typically scheduled on weekends and/or after normal business hours. Celtic will coordinate with NE DMV and get approval for any preventive maintenance work.
	T.4.7	 System shall ensure efficient system processing: No more than a one (1) second wait time to display a screen Average no more than a three (3) second response to inquiries to database Average no more than a 10-second response to calculate registration fees one (1) power unit with multiple jurisdictions Less than 30 minutes to calculate the fees for the largest accounts (6,000 vehicles) E-mail a temporary registration and/or invoice in less than 1 minute once a document is available to send (Or provide notification in the event of a failure.) Documents are sent to a printer within three (3) seconds 	Yes	Vendor	4-Base Product	For NE DMV, the CMCS solution has been sized considering 100 transactions per minute (average) with a peak number of transactions up to 600. The response time of simple transactions is in the range of <3 second with a medium workload transaction in the range of 2-5 seconds. For bulk calculations, the response time will be higher. Additionally, our solution is equipped with optimized software that supports efficient email and printing services.

T.5.1	System Availability – Solution Software must have a 99.9% uptime guarantee, excluding scheduled maintenance and downtime that has been mutually agreed upon between Contractor and the NE DMV. NE DMV will be responsible for network and hardware uptime for the on-site hosted solution.	Yes	Vendor	4-Base Product	Refer to the response provided in Req# T.4.2.
T.5.2	Up-time shall be defined as the time the system is responding correctly (able to successfully provide all operations specified in this RFP) and doing so within the performance requirements listed in this section and the SLA.	Yes	Vendor	4-Base Product	Refer to the response provided in Re1# T.4.7.
T.5.3	Contractor shall revert to previous releases of the application's components in the event of an unsuccessful deployment.	Yes	Vendor	4-Base Product	Our solution is capable of meeting a Recovery Point Objective of one (1) hour and a Recovery Time Objective of twenty-four (24) hours. Our Disaster Recovery Rehearsals, Failover testing, and Live-Failover Testing will provide a process for any production code and database scripts rollback and re-applying the change.
T.5.4	System shall reapply NE DMV customizations and configurations to new versions of the software.	No	Vendor	4-Base Product	Celtic is continuously looking for software upgrades that improve the efficiency as well as the security scenario which are integrated into the application using a thorough change management process.
T.5.5	System shall provide safeguards to ensure no user-initiated query or process will negatively impact system performance beyond an established threshold.	No	Vendor	4-Base Product	CMCS has been tested for OWASP vulnerabilities to ensure that the application will not disclose any sensitive data during application failure. Celtic has an established Real-Time Predictive Threat Modeling solution in place for regularly conducting vulnerability assessments and penetration testing and timely remediation of identified vulnerabilities as per industry best practices.
T.5.6	System shall have the ability to globally update all system components, configurations, system changes, and software in all environments	No	Vendor	4-Base Product	Celtic uses a well-organized release process that efficiently takes care of incremental releases in higher environments. The versioning mechanism used in Celtic ensures that only the required code gets deployed, validated, and released to the

	(DEV/UAT/PROD) from a central location without manual intervention. Once updates are complete, the application must indicate that the system was successfully updated. In addition, a system user must be able to view the current software version number and date the update was applied within the application.				higher environments. The version numbers, release date, and commit information on the application dashboard ensures controlled release.
T.6	Hardware				
T.6.1	 This application is designed for an on- site system. Contractor will be responsible for specifying hardware needs for the proposed solution in their response to this RFP. NE DMV shall procure any servers, VM hosts, workstations, printers, and any other IT equipment deemed necessary and approved by NE DMV for the development and design of the system. NE DMV will set up all servers, ESX hosts, VM's and workstations. 	No	Vendor	4-Base Product	Celtic will work with NE to identify and establish the best suitable infrastructure per current industry standards.
T.6.2	Contractor shall use the project management change request process laid out in Section V, with clearly defined expectations and required timelines, for any changes or additional hardware that is necessary for project success after the project start.	No	Vendor	4-Base Product	Celtic provides a browser-based Incident tracking system that is integrated with our proposed solution for reporting and tracking changes/enhancements. The below figure shows the Change Management Lifecycle. Change Management Lifecycle Identify Identified Analyze Prioritized Assess Change Identify Identified Change Change Change Impacts Change Log Submit to Change Change Ch

					 The primary objectives of the change management process are as follows: To manage each change request from initiation through closure To process change requests based on direction from authorized District representatives To communicate the impact of changes to project stakeholders, and To manage low-impact changes to mitigate the effect on schedule, budget, and scope One of the primary goals of the Celtic PMO will be to manage and maintain an environment of clear and common expectations regarding project scope in order to mitigate unnecessary project changes. 			
Т.7	Conversion Contractor shall acknowledge that NE DMV will be responsible for extract functions, while Contractor will be responsible for transfer and load functions. Contractor shall develop and execute a data conversion plan to migrate data from NE DMV MCS legacy application to the proposed							
T.7.1	 Conversion Process: A detailed description of: The conversion processes Record handling and inventory control process Data mapping Quality control activities 	No	Vendor	3- Custom	Celtic has performed data migration efforts for multiple jurisdictions. We will work with the NE DMV Implementation Manager to ensure the integrity and validity of the data. We will set up conversion strategy meetings with the required resources in NE DMV as needed. In line with this, the roles and responsibilities of the Celtic and NE DMV teams will be defined. We will run reports to help identify inconsistencies in the data			
					and provide these reports to the NE DMV for any necessary clean-up activities. These will aid in assessing the current status of the data and any required cleanup. We will run multiple trial conversions and use the application to help validate the converted data. Converted data also helps to verify that the application is working as designed. The conversion process will result in the archival of electronic records for a			

period of the seven (7) most current years of legacy data from the existing Credentialing related systems to the CMCS including all outstanding invoices.
The conversion process will be ongoing from day one of the projects and will end as the last step of the development phase when we perform the final conversion and load the new production database. During development, we will schedule several trial conversions as we complete the data mapping and data cleansing activities. We will utilize the converted data from trial conversions to load the test database and test the application using parallel testing. We will take customer applications that are being processed in production and enter them into the new customized solution. We will then compare the results from the test region against the production results and make any necessary changes. This approach will validate both the converted data and the application. We will continue with these iterations until the database is clean and the CMCS solution is functioning as expected. We will then run the final conversion.
 Below is a typical sequence of steps that make up our data plan and would be part of the NE DMV data conversion: Identify the required data sets to be converted during requirements gathering Obtain initial conversion files Table/Column level two-way mapping (Legacy New and New Legacy) Create conversion SQL for code tables Create delete SQL to clear data out of the database
 Conversion map creation First conversion Prepare data clean-up reports Weekly clean-up reports review meeting with NE DMV Second conversion Prepare data clean-up reports Perform data cleansing activities System test

	 Define test scripts and acceptance criteria System test - PASS Team Celtic readiness reviews Integrated system demonstration Review/update final (Cut-over) data conversion plans and schedule Review/update final transition/cut-over plans and schedule Review/update final education and training plans and schedule Review/update final testing plans and schedule Celtic will migrate all of the identified tables to the new Celtic data structures. We will create a two-way mapping plan to ensure no data fields are missed in the old format and ensure all the fields in the new data structure will contain valid values. Celtic will utilize conversion tools and programs, as necessary, to accomplish the data conversion task. This task is typically the longest in the project. The migration activity will consist of multiple steps depending on the current data conditions. Celtic will create various reports at each step of the conversion to ensure: Counts in and out are consistent Data fields contain expected values Records that are not converted have an explanation, so they can be fixed and/or deleted Our conversion approach is to eliminate any conversion exceptions prior to the final run by having multiple conversions using copies of production data and fixing exceptions as they occur. Our conversion programs will identify invalid field values such as invalid codes and invalid phone numbers, USDOT numbers, VINs, etc.
	The following diagram depicts our data migration process:

					Legacy Data Environment Data Staging and Test Environment Loading Target Environment Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files Image: Flat Files
T.7.2	Error Resolution: Contractor shall be responsible for identifying and resolving errors that occur during the conversion and migration process and formulate a mitigation plan.	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.
T.7.3	Roles: A description of roles and responsibilities for Contractors and NE DMV staff members.	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.
T.7.4	Schedule: Contractor shall provide a detailed activity schedule and timeline for the conversion process.	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.
T.7.5	 Data Cleansing: Existing data in the legacy application must be cleansed as part of the migration process. Cleansing activities include: Validating data contents to ensure that the stored information is accurate in accordance with the NE DMV's guidance Standardizing data formats for conformance 	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.
T.7.6	Data De-Duplication: Normalizing migrated data where possible to reduce duplicating data storage.	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.

T.7.7	Data Synchronization: Overlapping data in both the existing and new application systems must be synchronized during application transition.	No	Vendor	3- Custom	Refer to the response provided in Req# T.7.1.
T.8	System Security				
T.8.1	System shall provide access control by a role-based security component with user-defined roles and authorities. This will control what all users have access to and what functions all users can perform.	Yes	Vendor	4-Base Product	CMCS is a browser-based, role-based system that provides a User Management module allowing the creation of user roles by assigning full or limited access to each user role for customers, third-party agents, authorized users, other designated departments, and local users. This functionality controls the functions and aspects of the application various users can access based on the user role they are assigned.
					they are assigned.
T.8.2	Contractor shall conduct penetration and vulnerability testing on the software application quarterly and provide NE DMV with a summary of all findings.	No	Vendor	4-Base Product	Celtic has tested CMCS for OWASP vulnerabilities to ensure that the application does not disclose any sensitive data during the application failure. Celtic has an established Real-Time Predictive Threat Modeling solution in place for conducting vulnerability assessments and penetration testing on a regular basis, and timely remediation of identified vulnerabilities as per industry best practices.
T.8.3	Contractor shall ensure that the application complies with the encryption requirements in Internal Revenue Service Publication 1075 (Reference information on IRS website at <u>https://www.irs.gov/privacy-</u> <u>disclosure/encryption-requirements-of-</u> <u>publication-1075</u>).	Yes	Vendor	4-Base Product	CMCS communication uses SSL (secured channel) to ensure secure data communication while in motion. CMCS encrypts confidential data using industry-standard encryption methodology. Encryption includes passwords and security answers in the database while at rest. Celtic has implemented an AES 256 encryption algorithm for data encryption. The system provides the capability to integrate with NE DMV-provided SSL certificates or any third-party- provided certificates (TLS >= 1.2) for data encryption in transit. Our system follows industry standards data retention approach and it's flexible enough to comply with the NE DMV retention policy.

					During the requirement gathering session, we will understand and document the encryption requirements with NE DMV personnel.In addition, we also mask all the PII information in the database and do not store any critical information in the logs.
T.8.4	Contractor shall acknowledge that all components must run with the minimum required access levels possible and must never run as ROOT or an administrative user. Components must be able to run as a service (with a service account).	Yes	Vendor	4-Base Product	The CMCS can be run with a service account requiring minimum privileges.
T.8.5	All components must operate on the principle of least privilege.	Yes	Vendor	4-Base Product	Celtic understands and will comply with the requirements to ensure the CMCS components operate on the principle of least privilege.
T.8.6	Contractor shall acknowledge that databases must not be accessed by admin accounts for normal transactional purposes. Mechanisms, including HTTP headers and meta tags, shall require that pages containing sensitive information are not cached by either users' browsers or any intermediate servers.	Yes	Vendor	4-Base Product	Celtic is cognizant of the criteria and provides for CMCS to comply with this requirement. The admin account will not be allowed to access the database for transactional purposes. The users' browsers or any intermediate servers will not be allowed to cache sensitive information.
T.8.7	Sensitive data must not be supplied in any system URLs.	Yes	Vendor	4-Base Product	CMCS does not supply any sensitive information to any system URLs.
T.8.8	System shall implement server-side validations.	No	Vendor	4-Base Product	Celtic is cognizant of the requirement and will comply with the requirement.
T.8.9	Client-side validations shall be implemented as well, as needed.	No	Vendor	4-Base Product	The CMCS solution provides both client-side and server-side validations.
T.8.10	System shall allow for data encryption while at rest and in motion.	No	Vendor	4-Base Product	CMCS communication uses SSL (secured channel) to ensure secure data communication while in motion. The system encrypts confidential data using industry-standard encryption

					methodology. Encryption includes passwords and security answers in the database while at rest.
T.8.11	System shall support at minimum AES 256-bit encryption.	No	Vendor	4-Base Product	Currently, CMCS supports AES 128-bit encryption and will be customized to support AES 256-bit encryption.
T.8.12	Communication between all components must make use of a minimum of TLS 1.2 for all sensitive data transmission.	No	Vendor	4-Base Product	CMCS provides the ability to integrate with NE DMV-provided SSL certificates or any third-party-provided certificates (TLS >= 1.2) for transmitting sensitive data.
T.8.13	Contractor shall be solely responsible for ensuring that the application, including both COTS (Customized Off the Shelf) and custom developed portions, are developed and secure by cybersecurity best practices and vulnerability detection as defined by the NITC standards.	No	Vendor	4-Base Product	CMCS has been tested for OWASP's top 10 vulnerabilities to ensure that the application does not disclose any sensitive data during application failure. Celtic has an established Real-Time Predictive Threat Modeling solution in place for conducting vulnerability assessments and penetration testing on a regular basis, and timely remediation of identified vulnerabilities as per industry best practices.
T.8.14	System shall allow authorized users (system administrators) to grant security level permissions to users.	Yes	Vendor	4-Base Product	CMCS is a browser-based, role-based system that provides a User Management module to create user roles to allow or limit access to functionalities for different user types. CMCS will leverage NE DMV's token swap communication to grant authorization.
T.8.15	System shall allow authorized users to grant security level permission only up to, but not including their own level.	Yes	Vendor	4-Base Product	CMCS provides the User Management functionality that allows authorized users to grant security level permission to their role as well as to other user roles as needed.
T.8.16	System shall log all user access information (sign-on, sign off, source IP) and include date and time references for auditing purposes.	Yes	Vendor	4-Base Product	CMCS provides the User Activity logging and reporting functionality that tracks user activities such as login, logout, user privilege changes, accounts created, deleted, changed, or suspended, and administrative overrides. The system also logs all the requests/responses to interfaces and system errors.
T.8.17	System shall log all information accessed by users to provide audit trails.	Yes	Vendor	4-Base Product	CMCS captures audit trail events in the user activity table for viewing and reporting the important activities done by the user after logging into the system.

T.8.18	At no point in time shall the Contractor share data or accounts with anyone outside of the state, including subcontractors.	Yes	Vendor	4-Base Product	All Celtic employees sign a Non-disclosure Agreement (NDA) upon joining the company. It requires them to abide by a Code of Conduct and various company policies. The project members also sign the customer-specific NDAs depending on the customer's contractual requirements.
T.8.19	System shall not have any embedded user ID's or passwords (credentials).	Yes	Vendor	4-Base Product	CMCS is built on a very secure architecture with no embedded user IDs or passwords.
T.8.20	System shall allow authorized NE DMV Users to add, modify, suspend, and deactivate users; assign users to user roles and security groups; and grant security and access permissions while the system is online.	No	Vendor	4-Base Product	CMCS is a role-based system that provides the User Management module whereby the users will be granted access to specific modules and functionalities of the system depending on the role they are assigned in the system. The user can perform all the activities as mentioned in this requirement if their user role allows so.
T.8.21	System shall provide a summary of all users based on access rights and shall provide a variety of filtering and sorting options (such as user status, etc.) for viewing users.	No	Vendor	4-Base Product	CMCS provides the reporting and inquiry functionalities to generate a summary of all users filtered by their user roles, status, and a range of other filtering and sorting options.
T.8.22	System shall assign default transaction queues and service functions to users. System shall also allow changes to these queues and service functions by authorized users during business hours.	No	Vendor	4-Base Product	 CMCS provides functionalities like Web Processing – Pending and Role Management to assign transaction reviews and access to service functions based on user roles. The Web Processing – Pending functionality allows the authorized users to retrieve the assigned transactions for internal review from the queue for approval/rejection. The Role Management functionality allows creating and managing user roles to limit the access to functions available across the system for all user roles.
T.8.23	System shall provide an error log for NE DMV Users to review when assisting an MC Custo mer.	No	Vendor	4-Base Product	CMCS provides functionalities such as Application Logs, Exception Logs, and Screenshots that allow authorized users to track the errors the customer may encounter and review them to provide resolution.

T.8.24	System shall capture a user session for support, review, and auditing purposes.	No	Vendor	4-Base Product	CMCS provides the Application Logs functionality to capture, review and audit the user session information when required.
T.8.25	System shall provide the ability for remote assistance (view an active user session).	No	Vendor	4-Base Product	CMCS provides the Work in Progress (WIP) functionality to allow authorized users to retrieve, view, and access an active session of a user.
T.8.26	System shall capture transaction rejection reasons in a log for NE DMV Users to review when assisting an MC Customer.	No	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirement related to capturing transaction rejection reasons in a log for NE DMV users to review and assist customers.
Т.9	Technical Audit				
T.9.1	System shall provide and maintain an audit trail of any changes made to the database. The audit trail must be linked to the MMCIS user making the change.	No	Vendor	4-Base Product	Celtic understands the significance of the audit trail of the data. And therefore, all the data changes done by the user are logged with the user ID and timestamp. Additionally, the system has a full audit trail of transaction overrides and records the fees that are waived and what the original fee was. The system can be configured to force the user to enter a comment when waiving fees. CMCS captures audit trail events in the user activity table for viewing and reporting the important activities done by the user after logging in.
T.9.2	Logging shall be enabled 24 hours per day, 7 days per week and kept for an agreed upon period to assist in case of future investigations and access control monitoring.	No	Vendor	4-Base Product	The CMCS application logs will always be available until NE decides to purge the logs.
T.9.3	The following events must be logged: • Failed or rejected user authentication and access control policy violation • Failed or rejected user action • Use of system utilities • Use of external resources • All activities performed by high level privileges accounts (System administrators, system operators) • System start-up and stop	No	Vendor	3- Custom	The CMCS solution already logs most of the events mentioned in this requirement. During the requirement gathering session, Celtic will understand and document the NE DMV's requirements and configure the system.

	Changes, or attempt to change, configuration and security settings				
T.10	Alerts			I	
T.10.1	System shall allow the creation of user- defined alerts, to be defined during the development process.	No	Vendor	3- Custom	During the requirement gathering session, Celtic will understand and document the requirement related to user- defined alerts and configure the system.
T.10.2	System shall allow for system- generated alerts, including but not limited to: • Security violations • System event logs • Database backup failures • Storage space notifications (low disk space for databases) • Communication errors with external agencies (interface URL) • Certificate expirations (within 90 days) • Server availability	No	Vendor	3- Custom	During the requirement gathering session, Celtic will understand and document the requirement related to system- generated alerts to configure the system.
T.11	System Change Request Management	: – Examp	le: Screen	Changes,	etc.
T.11.1	System shall utilize the change request component in Section V as the primary means for determining processes and workflow.	No	Vendor	4-Base Product	Celtic understands and agrees with the requirement of adhering to the change request process described in Section V as the primary means for determining processes and workflows.
T.11.2	System shall have a centralized location for authorized users to request and track changes.	No	Vendor	4-Base Product	Celtic shall use its web-based Incident Tracking System to request and track all the changes. Incident and enhancement requests, including fee changes, will be reported through it. Supporting documents, including screenshots, can be uploaded with the incident for clarification. Severity indicators are assigned as follows: 1. Severity Level 1 (High) is defined as urgent situations, when any part, portion, or module of the contractor's system is down, and the NE DMV is unable to use the CMCS. This level has a material impact to NE DMV's daily operations. Testing would be halted until the defects are resolved.

		 Severity Level 2 (Medium) is defined as a critical software system component(s) that has significant outages and/or failure precluding its successful operation. These are defects that would impede, but not stop operations. Testing would be halted until the defects are resolved. Severity Level 3 (Low) is defined as a minor problem that exists with the contractor's system, but most of the
		functions are still usable, and some circumvention may be required to provide service (for example, an infrequently used subcommand gives an incorrect response). These defects are minor or administrative in nature. Testing can continue and does not require immediate issue resolution.
		 Severity Level 4 is defined as a very minor problem or question that does not affect the contractor system's function (for example, the text of a message is worded poorly or misspelled).
		Priorities will be assigned depending on business needs.
		NE DMV and Celtic support personnel will be notified via automatic email from Celtic Incident Tracking System (CITS) when a ticket is created or updated.
		Celtic support personal will review the incident and confirm its understanding with NE DMV before it moves through the process.
		As an incident moves through the defect resolution process, it will move through various stages. Each status change will generate an email to NE DMV and Celtic support as follows:
		 Feedback – The incident has been reviewed and more information is required from the customer for clarification

					 Assign – The incident is assigned to the development QA – Work is completed and being tested
					 Fixed – QA Testing is complete Resolved – Ready for business user acceptance testing Closed – Business has approved the incident and it will be scheduled for release to production
					Ensure that the security of NE DMV's confidential data is always maintained.
					Establish good communication and a good working/business relationship.
					Minimize the impact on the business by utilizing off hours to perform scheduled or preventative maintenance processes when possible.
					Celtic provides a pool of support personnel that will be assigned to this contract to manage and respond to calls for service based on required skill sets and problem determination.
T.11.3	System shall provide a system for tracking issues (ticketing system) reported by all users, whether NE DMV or external.	No	Vendor	4-Base Product	Celtic Incident Tracking System (CITS), as mentioned above, is used to track all the issues by all users.
T.11.4	System shall allow an authorized user to record reasons for system changes.	No	Vendor	4-Base Product	The CITS system allows recording the reason for the change.
T.11.5	System shall provide one single rules repository where NE DMV system change requests will be defined, updated, and maintained while maintaining role-based access. Once defined, the change requests can be deployed and used by multiple components, if needed.	Yes	Vendor	4-Base Product	The CITS system allows single rules repository to define, update, maintain all the change requests, and is role-based. The application is built and deployed based on these change requests.
T.11.6	System shall allow system change	Yes	Vendor	4-Base	The CITS system allows to enter effective date and end date
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	requests to contain an effective date			Product	for all the change requests.
	and, if applicable, an end date.				

T.12	Backup, Recovery, and Disaster Planr	ning			
T.12.1	Contractor shall provide a Disaster Recovery Plan that includes redundant sites at different geographical locations (Lincoln and Omaha Data Centers).	Yes	Vendor	3- Custom	Celtic will configure the Virtual Machine replication between the two Data Centers using vSphere Replication so that in case of disaster, the Virtual Machines can be started from the Disaster Recovery Location.
T.12.2	System shall provide audit and transaction log files, capturing before and after images for all database systems.	No	Vendor	4-Base Product	The CMCS Client Support module provides the functionalities to view application logs, exception logs, and screenshots for tracking system errors. The Exception Logs functionality captures all the exceptions that occurred in the system. The captured exceptions are automatically uploaded to the system's exception logs repository.
T.12.3	System shall roll back failed transactions.	No	Vendor	4-Base Product	The CMCS solution allows rolling back transactions at the application level.
T.12.4	System shall have point-in-time recovery capabilities for all databases. This means upon any failure; the database can be recovered to the last point of consistent state.	No	Vendor	3- Custom	Celtic will configure the database backups based on the agreed timeframe with NE DMV. This will allow using the most recent backup checkpoint to recover the data.
T.12.5	System shall monitor, archive, and purge SQL error log tables, transaction log tables, etc. according to NE DMV defined schedules and procedures.	No	Vendor	4-Base Product	The CMCS solution provides the purge facility to allow data purge from the SQL database based on the period as defined in accordance with NE DMV.
T.12.6	System shall provide the ability for a full system and data recovery from backups. Contractor shall set up and maintain backup schedules and verify backups. Test restores will be scheduled on a regular basis, to be determined by Contractor and NE DMV.	Yes	Vendor	3- Custom	Celtic will configure a full backup of Virtual Machines based on the agreed backup schedule and frequency. We will conduct the restoration check and verify the integrity of the data backup.
T.12.7	System shall allow for a single sign-on to the application with the STN Domain using LDAP and Azure for NE DMV	No	Vendor	3- Custom	The CMCS solution supports single sign-on authentication and is configurable to support authentication using both LDAP and Azure for single sign-on.

Users. External users shall sign on via		
web interface.		

T.13	Infrastructure				
T.13.1	No Contractor software shall prohibit the installation or updating of server components provided by OEM Contractors (i.e., Windows O/S security patches).	No	Vendor	4-Base Product	The CMCS solution shall not prohibit the installation or update of the server components and security patches.
T.13.2	If an incompatibility is discovered after an update is applied, Contractor must update their software and eliminate the incompatibility to the satisfaction of NE DMV within thirty (30) calendar days after notification of the issue.	No	Vendor	4-Base Product	The CMCS solution is highly scalable to accommodate any incompatibilities and resolve the issue.
T.13.3	Contractor must maintain all software versions and ensure that NE DMV is only running currently supported software, from any provider.	No	Vendor	4-Base Product	The CMCS solution provides the Version Info functionality that records all the version history of the application and displays the latest version of the application. Below is a sample screeen of the CMCS Version Info functionality:
T.13.4	System shall not contain any software or tools that are in beta testing without first acquiring NE DMV approval.	Yes	Vendor	4-Base Product	Celtic does not use any beta software or tools. We follow the established change management process and after due approval required to install the necessary software or tools.
T.13.5	Applications cannot require the installation of Microsoft Office products on the server.	Yes	Vendor	4-Base Product	The CMCS solution does not require the installation of Microsoft Office products on the server.

T.13.6	Contractor must agree that the State possesses sole ownership of all the information and data collected as a direct result of this contract. The data cannot be used for any purpose outside of the application.	Yes	Vendor	4-Base Product	Celtic agrees that the State possesses sole ownership of all the information and data collected as a direct result of this contract. All Celtic employees sign a Non-disclosure Agreement (NDA) upon joining the company. It requires them to abide by a Code of Conduct and various policies of the company. The customer- specific NDAs are also signed by the project members depending on the customer contractual requirements to ensure no data is utilized outside of the application.
T.14	Change Management		-	•	
T.14.1	The objective of NE DMV Change Management is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to IT infrastructure in a secure manner.	Yes	Vendor	4-Base Product	Refer to the response provided in Req# T.6.2.
T.14.2	All changes to projects assigned (DEV/UAT/PROD): Contractor shall utilize the NE DMV Change Management calendar to document the work that is to be performed.	Yes	Vendor	4-Base Product	Refer to Celtic's change management process described in Req #T.6.2. The process also supports the timeline management and tracking of the change requests in consecutive environments which can be easily configured to plan releases.
T.14.3	Change requests are to be entered a minimum of three (3) days in advance of any work to be performed, allowing for ample time to assess any impacts.	Yes	Vendor	4-Base Product	Celtic provides a comprehensive defect tracking and reporting tool and plans for issue resolution with each implementation project. Celtic's Issue Tracking System will be used to report all suspected defects, automatically assign each incident to support personnel, and track the resolution process for the given severity levels and status codes.
T.14.4	Emergency change requests that require immediate action will need to be approved by NE DMV to ensure that any impacts are quickly assessed.	Yes	Vendor	4-Base Product	Celtic has an unsurpassed reputation for world-class product maintenance and support to the Motor Carrier industry. Celtic understands the urgency of requested changes and issues resolution.

					Our 'customer-first' philosophy, and attentiveness to our customer's issues (along with our online incident tracking system), will ensure you get prompt issue remediation, data cleanup, and change management services. At Celtic, we assure you that our service will surpass the Service Level Agreement (SLA).
T.14.5	All changes must be tested and approved by NE DMV prior to deployment.	Yes	Vendor	4-Base Product	Celtic will validate all the requirements as specified in the RFP. As part of our testing process, Celtic will perform all of the different types of testing as documented below to ensure that the CMCS solution conforms to the RFP requirements, both functional and non-functional. All test results will be published in a report which will enable the NE DMV team to make an informed Go-Live decision before Production deployment. Level 1 Testing: • Activities Involved • Design sprints will cover Functional or Technical design/ UI/ POCs • Build sprints will cover design walkthrough, build, test plan, unit testing, Demo, and retrospection meeting • Code for the user stories will be reviewed in the code review process • Regular tracking through daily scrum meetings and Scrum of scrum meeting • System demo will be given to the stakeholders after each sprint • Key Deliverables • Sprint Backlog • Functional Design, Technical design, Test Plan • Data Conversion scripts, test scripts, converted data • Sprint Demo version of the software • Sign off after the Sprint demo • User Stories completion of the sprint accepted by the product owner

 Automated acceptance test cases completed for the user stories in the sprint.
Level 2 Testing:
Activities Involved
Activities Involved Proparo System Tast casos
5 Frepare System rest cases
 Execution of system test cases
 Execution of Regression test cases
 NFR testing (Accessibility, Performance, and
Security Testing)
 Defect raising, re-testing, and tracking for
closure
 Preparation of test summary report
 Log and track defects
 Every defects identified
CDD (Conference Deem Dilet) Session Demo
O CRF (Conterence Room Fliot) Session Denio
for the PI should be completed and accepted by
the stakeholders. CRP sessions will be
conducted with all stakeholders to get feedback
on all the completed modules during the PI to
get early feedback and take corrective actions
Key Deliverables
o Defect Log
Sign off oritoria
o Sign-on chiena
 Provide testing support
 Review and sign-off
 System Integration testing gating met
 NFR testing for that increment completed for
that PI.
 Sign off after the CRP Session demo for that PI.
Lovel 2 Testing:
Activities Involved
 Release sprint covering User Acceptance
Testing and deployment at the end of every
program increment
 Attend Defect Triage Meetings with NE DMV

					 Analyze issues raised during acceptance testing Rework on defects Key Deliverables Acceptance tested code Defect Log Delivered Features log Prioritized User stories after each PI Sign-off criteria Review and signoff acceptance testing defects closure UAT Acceptance Gating met User acceptance testing for that increment completed for that PI
T.14.6	Contractor shall work with NE DMV to mitigate or reduce any residual risk.	Yes	Vendor	4-Base Product	Celtic will deploy an appropriate level of staff consisting of technical leads, developers, and QA leads to be on-site for the first ten (10) full business days of operations. The on-site support team will resolve installation and operational problems that may arise during the timeframe. Celtic ensures the stability of the application post-production with quick resolution/workaround for any issues.
T.14.7	Contractor shall provide NE DMV access to any change management system and process utilized by the Contractor to manage change as it relates to the proposed application.	Yes	Vendor	4-Base Product	Celtic provides a browser-based Incident tracking system (CTS-Track) which is integrated with our proposed solution for reporting and tracking changes/enhancements.
T.15	System Performance Metrics				
T.15.1	System shall provide the ability to view, print and export a dashboard of key performance indicators, with user- defined parameters, showing graphical information on business and technical performance against service-level objectives.	No	Vendor	4-Base Product	The CMCS solution uses AppDynamics which displays all the performance indicators on the dashboard and allows viewing, printing, and exporting them when required. The dashboard also comprises a graphical view of all the performance-related information.
T.15.2	System shall define and configure statistical data parameters including:	No	Vendor	3- Custom	During the requirement gathering session, we will understand, and document requirements related to defining and configuring

	 Specification of time frames for statistical data storage requirements Specification of purge criteria, parameters, and timeframes 				statistical data parameters and modify the system to meet this requirement.
T.15.3	System shall allow authorized users to define and configure system controls, operational parameters, system tables, etc.	No	Vendor	3- Custom	During the requirement gathering session, we will understand, and document requirements related to allowing authorized users to define and configure system controls, operational parameters, and system tables and modify the system to meet this requirement.
T.15.4	System shall allow all changes to take effect based on a date and time parameter set by an authorized user ahead of time. NE DMV will use this feature to pre-load system changes that relate to new laws and changes that take effect on preplanned dates (i.e., enter data on Dec 5 to take effect on January 1 [start of calendar year] or enter data on June 20 to take effect on July 1 [start of Nebraska Fiscal Year]).	No	Vendor	3- Custom	During the requirement gathering session, we will understand, and document requirements related to allowing changes to take effect based on date and time parameters set by an authorized user ahead of time and modify the system to meet this requirement.
T.15.5	System shall log all transactions for security and performance measure reporting and analysis. Reports and analysis must have the capability for a user to enter a date range to view or print management reports.	Yes	Vendor	4-Base Product	The above-mentioned AppDynamics tool, which is used CMCS, logs all transactions for security and performance measure reporting and analysis. And the reports and analysis have the capability for a user to enter a date range to view or print management reports.
T.16	Network/Active Directory Accounts				
T.16.1	System shall utilize the existing State of Nebraska network which is managed by the NE OCIO and utilized for all NE DMV network traffic.	Yes	Vendor	4-Base Product	The CMCS solution will reside at the Nebraska State-hosted data center. It will utilize the network infrastructure already in place at these data centers.
T.16.2	System shall provide a single sign-on to the application for external users that can be managed by the end user. Example: User can change password, unlock account.	No	Vendor	4-Base Product	The CMCS solution allows external users to access the application with the single sign-on functionality. The system allows authorized internal users to manage authorization access for external users.

T.16.3	System shall automatically log out users which have been inactive for a specified period. Users can simply log back into the system to resume activity from the point of timeout.	Yes	Vendor	4-Base Product	The CMCS solution automatically logs out users that have been inactive for a specified duration. The auto-logout period will be configured in the system in accordance with NE DMV.
T.16.4	System shall deactivate users that have not logged into the system within 90 days and will allow for notifications on pending password expiration upon login.	No	Vendor	4-Base Product	The CMCS solution sends a password expiration notification to alert the user of the inactivity within the past 90 days. The system requires such users to reset their password to retrieve their access.
T.17	Field and screen validation				
T.17.1	System shall provide a visual distinction between mandatory and non-mandatory fields.	Yes	Vendor	4-Base Product	The CMCS solution marks the mandatory fields on a screen with a red asterisk (*) to differentiate them from the non-mandatory fields.
T.17.2	System shall perform field validation of data upon entry.	Yes	Vendor	4-Base Product	The CMCS solution is capable of performing field validations when a user proceeds from the given screen after entering the required data. The validations are displayed at the top of the screen.
T.17.3	System shall display errors on the appropriate screen for all users.	Yes	Vendor	4-Base Product	The CMCS solution provides codified hard edits, soft edits, warning messages, and informative messages as applicable throughout the system. The validation messages will be associated with NE DMV's business rules and other validations that help the support staff identify the related business rules when the authorized users (internal or external) receive an error message. Below is a sample of hard edit (an edit that cannot be bypassed): • ENTPAY144: [E] Payment must be made with cash, certified funds or electronic funds only until 08/21/2020. Payment Below is a sample of soft edit (an edit that can be overridden):

					CRNOT IN [3558] The UDOT Incest is MCSP Sep - 65-0000 Resolution of Operating Authority. Apply For A Permit EVITCATION [1] Override Resolution required. Override Resolution required. CVINFORMULT VICES UP Control Content on the day. CVINFORMULT VICES UP Content on the day. CVINFORMENT ON the day. CVINFOR
T.17.4	System shall have printable user application screens configurable to local and network printers, using print commands provided by the browser.	Yes	Vendor	4-Base Product	The CMCS solution supports printing user screens in local and network printers using the print command provided by the browser.
T.18	User Interface				
T.18.1	System shall include a browser-based user interface.	No	Vendor	4-Base Product	CMCS solution is a browser-based application consisting of a modernized responsive interface that adapts to desktops, tablets, and handheld devices. CMCS shall be accessed and compatible with standard browsers like Chrome, Edge, Firefox, and Safari.
T.18.2	System shall incorporate history views at the record level that are easy to follow and indicate date, time, and the user who made the update.	Yes	Vendor	4-Base Product	CMCS provides historical information for all inquiry functions allowing users to view the history related to a record including customer name, transaction details, last updated timestamp of the user that made the change, etc.
T.18.3	System shall provide the ability for users to select their preferred language from a list of several, based on NE DMV needs. This functionality is not required, but desired.	No	Vendor	4-Base Product	CMCS provides out of the box multilingual support allowing users to set their language preference at the time of registering their profile or account. It also includes Update Profile or Customer functions for users to update their language preference as needed. During the requirement gathering session, we will understand and document the NE DMV needs to meet this requirement.
T.18.4	System shall incorporate an online help feature through a help guide, which is updated by the contractor monthly.	No	Vendor	4-Base Product	CMCS solution provides a fully integrated online user guide for all functions of the system. The system also provides a Frequently Asked Question (FAQ) feature providing detailed answers with screenshots to help the users through specific scenarios.

				<text><text></text></text>
T.18.5	System shall provide help/balloon tips for individual fields deemed necessary by NE DMV.	Ver	idor 4-Base Product	CMCS provides the online context-sensitive help functionality for various fields/labels on the data entry screens across the application. Below is a sample transaction screen displaying context- sensitive help functionality: User Dashboard Verding Transactions Resume Service Feet Type Pending Transactions Fileet Type Fileet Type Pending Transactions Fileet Type File

					Colorado Trailer: N-NOV CONSTRUCTION OF CONSTRUCTURE OF CONSTRUCTURE OF CONSTRUCTURE OF CONSTRUCTURE OF CONSTR
T.18.6	System shall provide a chat feature that allows MC Customers to reach out to NE DMV Users for assistance. This may be a stand-alone chat feature or integrate with the state's vendor for other web services.		Vendor	3- Custom	During the requirement gathering session, we will understand and document the NE DMV requirements related to integrating a chat feature within the system.
T.18.7	System shall allow all users to make changes to applicable profile settings.	No	Vendor	4-Base Product	 CMCS solution provides Update User functionality that allows customers to make changes to applicable profile settings as follows: Update application theme Update security question and answer Update customer dashboard widget settings Reset password Other allowable settings
T.18.8	System shall support auto-complete functionality for code table lookups as the user begins to enter data in the code table lookup field.	No	Vendor	4-Base Product	CMCS provides the autocomplete functionality for applicable fields and tables, for example, Zip Code.
T.18.9	System shall support pre-fill fields in appropriate pre-formatted screens, eliminating redundant data entry and without impacting the usability.	No	Vendor	4-Base Product	CMCS supports the ability to pre-fill fields on all applicable screens eliminating data redundancy and any impact on the usability of the data.
T.18.10	System shall allow all users to move forward and backward between screens to complete data fields without the loss of data entered.	Yes	Vendor	4-Base Product	CMCS supports asynchronous navigation to allow users to navigate back and forth between screens or tabs while saving the entered data.

T.18.11	System shall allow users to correct errors without having to retype an entire field.	Yes	Vendor	4-Base Product	The CMCS solution is capable of highlighting the errors encountered on a screen while retaining the information entered by the user and allowing them to correct it without retyping the entire field.
T.18.12	System shall provide standard form navigation and allow movement from one work area to another via mouse and keyboard.	No	Vendor	4-Base Product	CMCS supports standard form navigation and allows movement from one work area to another via mouse and keyboard.
T.18.13	System shall provide default, configurable values for fields based on previous input or other mechanisms. Currently used defaults should be incorporated.	Yes	Vendor	3- Custom	CMCS will incorporate the used default values per the requirement. For instance, the system will configure values for fields including Vehicle Type, Inventory Type, etc. During the requirements gathering session, we will understand and document the fields that must provide default or configurable values as per NE DMV requirements.
T.18.14	System shall translate codes to U.S. English-language words or phrases on the output screen and reports for all codes used.	No	Vendor	4-Base Product	The CMCS solution includes the description for all the codes in U.S. English. For example, TT – Truck Tractor, BS – Bus, etc.
T.18.15	System shall support editing and validation rules for all mandatory fields, clearly indicating data which failed validation and reason for failure.	Yes	Vendor	4-Base Product	CMCS is capable of displaying appropriate validations and error messages for all mandatory fields indicating the field for the validation and relevant reason. Below is a sample screen of a rejected transaction indicating the field that caused the validation and the applicable reason:
T.18.16	System shall be configurable to disable copy and paste for certain fields.	Yes	Vendor	4-Base Product	CMCS solution provides the ability to disable copy and paste information for certain fields as required. During the requirements gathering session, we will understand and document the list of fields that need to be configured for disabling data copy and paste.

T.18.17	System shall support the use of Windows Shortcut Keys.	Yes	Vendor	4-Base Product	CMCS provides support for the usage of Windows Shortcut Keys.
T.18.18	System shall provide all users with a summary screen prior to completing a transaction.	Yes	Vendor	4-Base Product	CMCS provides the verification or summary screen that allows users to review information they entered on the previous screen along with an option to return to the previous screen to apply changes if required before completing the transaction.
T.18.19	System shall support the ability to execute multiple transactions on the same screen and session, where applicable.	No	Vendor	4-Base Product	CMCS supports the ability to process multiple transactions in a single session and on the same screen. For instance, the Renewal, Transfer Vehicle, and Combined Vehicle functionalities allow processing multiple vehicle supplements, including adding, updating, transferring, and deleting the vehicles.
T.18.20	System shall allow an authorized user to find, enter and update MC Customer records.	Yes	Vendor	4-Base Product	CMCS grants authorized users the permission to find, enter and update the customer records based on their user role.
T.18.21	System shall comply with Section 508 of the U.S. Rehabilitation Act, or at minimum, be compatible with screen readers (both the site and any downloadable artifacts), capable of displaying large fonts, and content context which does not rely on color alone. <u>https://www.section508.gov/manage/la</u> <u>ws-and-policies/</u>	Yes	Vendor	4-Base Product	CMCS fully complies with Section 508. The system is compatible with screen readers, capable of adjusting the font size, and does not rely on the color of the text to ensure ease of accessibility and readability for the disabled.
T.19	Printing / PDF Files				
T.19.1	System shall provide all users the ability to export/download documents in a non-editable PDF format and allow for the printing of those PDF files.	No	Vendor	4-Base Product	The CMCS solution provides the ability to export or download documents in a non-editable PDF format and print the PDF files.
T.19.2	System shall provide the ability to allow NE DMV Users to change their default printer/tray on demand per user and per document type.	No	Vendor	3- Custom	The CMCS solution provides the ability to change the default printer based on the location.

					We will modify the system to allow the user to change their default printer on demand per user and document type.
T.19.3	System shall provide the ability to print documents and forms for specified users and can have specific document types print to different trays.	No	Vendor	3- Custom	The CMCS solution will be modified to allow the printing of documents and forms for specified users and specific document types to different trays.
T.19.4	System shall provide the ability to print documents and forms in more than one output size and on pre-formatted security paper (i.e., IRP Bills, etc.).	No	Vendor	4-Base Product	The CMCS solution provides the ability to print different documents in different sizes on a pre-formatted security paper.
T.19.5	System shall provide the ability to reprint documents.	No	Vendor	4-Base Product	The CMCS Reprint functionality allows authorized users to generate all documents produced by the system or submitted by external sources. Below is a sample screen of the Reprint functionality menu: Reprint Invoice Cabcard TVC Shipping Document More Renewal Notice Suspension Letter Delete Vehicle Letter Fee Schedule Inquiry Factory Price Inquiry Audit / Error Correction Inquiry

T.19.6	System shall provide the ability to adjust formatting to print documents on letterhead and envelopes.	No	Vendor	3- Custom	Celtic will modify the CMCS solution system to provide the ability to adjust formatting to print documents on letterhead and envelopes.
T.19.7	System shall provide the ability to print identifying information on any output document including date and time of output, operator, location, etc.	No	Vendor	4-Base Product	The CMCS solution provides the ability to print identifying information such as date, user, and location on any output document.
T.20	Self Service Front End				
T.20.1	 System shall include an integrated front-end application for all users that includes, but is not limited to the following functionality: Integrate with the NE DMV web portal to provide a single point of access for all NE DMV online services. Provide the same look and feel on the external business portal and the internal application, including common account, processing, inquiry, reporting etc. Provide MC Customers with full-service capabilities for all IRP and IFTA transactions and services. Update account information (contact information, addresses). Retrieve, view, and print current and expired account invoices, balances due, and account histories. 	No	Vendor	4-Base Product	 The Celtic Motor Carrier Solution (CMCS) comprises IRP, IFTA, and CVIEW modules that are fully mature, totally integrated, highly scalable, and ready to implement, satisfying the NE DMV's requirements. We employ continuous improvement techniques to capitalize on advanced technologies and meet the advanced requirements of users. CMCS provides the ability to integrate with the NE DMV web portal and support single sign-on authentication for users to use a single set of credentials across all NE DMV online services. The system ensures a consistent look and feel (UI/UX) across all programs (IRP, IFTA, CVIEW) within the application and portals for internal and external users. Our system is browser-based and role-based which allows users to access the service capabilities and functionalities for all IRP and IFTA transactions within the system depending on the user role assigned to them. The CMCS User Management module will accommodate the creation of roles for various user types to limit their access to all functions and features available throughout the application. CMCS also allows for retrieval, viewing, and printing of current and expired account invoices, balances due, and account history as follows: Reprint functionality allows the retrieval, viewing, and printing of invoices and other credentials or letters.

					 Customer Ledger Report functionality allows for retrieval, viewing, and printing of balances due. Customer Inquiry functionality allows for retrieval, viewing, and printing of account, customer, or transaction histories.
T.21	Document Management				
T.21.1	System shall support the ability to scan and import documents to be included in a record.	No	Vendor	4-Base Product	 CTS-Doc is Celtic's integrated Document Management system that allows inline scanning/uploading, and auto-indexing of required documents collected across the transaction flow. The document management system provides the following functions for users to browse, upload, and scan the documents against the indexing information including Account No., TIN, USDOT, Fleet No, etc.: Scan Now – This function allows users to scan and upload documents for a given transaction at once. Scan Later (processed later from queue) – This function allows users to schedule the document scan for later and complete the transaction. The system processes document scan and upload through a batch process. No Scan Required – This function indicates no documents are required for transaction processing. Once a document is scanned and uploaded, the system assigns a unique number to each document. Users can click the Document Number displayed on the screen to open the document in a popup window from the integrated application.
T.21.2	System shall support scanning and indexing (i.e., bar codes, QR codes, etc.) all documents at the time of transaction, for electronic tracking.	No	Vendor	3- Custom	CMCS supports scanning and indexing all documents for transaction processing and tracking of such documents. In order to fully utilize the functionalities of CTS-Doc, the users must download and install the Client Package to enable support for the document scanner. The inquiry functionality allows users to track scanned and indexed documents at the transaction level.

					We will modify the system to offer support for bar codes and QR codes to scan and index documents.
T.21.3	System shall support the ability to scan documents to be included in the record in a batch process after a transaction has been completed.	No	Vendor	4-Base Product	 The Scan Later functionality of our integrated document management system allows a user to schedule the document scan to be processed later while completing the transaction at once. The Queue Management functionality allows authorized users to search, scan and upload the documents scheduled to be scanned later.
T.21.4	System shall provide the ability to retrieve an image from the document management system via relevant transaction screens.	No	Vendor	4-Base Product	CMCS provides the ability to perform an inquiry to retrieve a document from the document management system by clicking the linked Document Number for the preferred document for a given transaction. The retrieved document opens in a new popup screen.
T.21.5	System shall display document images inside the same browser being used to navigate the application.	No	Vendor	4-Base Product	Currently, the CMCS solution opens the documents/document images in a separate popup window of the browser in use. We will configure the system to display the documents/document images within the same browser being used to navigate the application.
T.21.6	System shall allow all users to pick from table driven lists of authorized source documentation (i.e., IRP registration, IFTA return, etc.). Access to specific document types will be granted per NE DMV business rules. All transactions shall be logged.	No	Vendor	4-Base Product	 The CTS-Doc system contains the CD_DOCS table that allows categorizing various documents application-wise (i.e., IRP, IFTA, etc.) and transaction-wise (i.e., Customer, Fleet, Vehicle, etc.). This allows the users to scan and upload the documents to DMS from the integrated application as well as the standalone DMS. The system logs all the processed transactions including the documents uploaded. During the requirement gathering session, we will understand and document the NE DMV business rules that allow users to scan and upload the documents to DMS from the integrated application as well as the standalone DMS.

T.21.7	System shall be able to create, print, electronically transmit, and track all outgoing correspondence (letter, e- mail, and text message).	No	Vendor	4-Base Product	CTS-Doc provides the ability to view, print, email, and fax documents through Document Search and Document Edit functionalities. Only authorized users will be able to access these functionalities. The permissions to provide access to the Document functionalities are configurable.
T.21.8	System shall transmit document images to a central image database.	No	Vendor	4-Base Product	 The CTS-Doc solution stores the uploaded documents on the DMS application server or a third-party interface like SharePoint, FileNet, etc., based on the configuration. 1. DMS Application Server - If the documents are stored on the DMS application server, then the path to the documents can be obtained from the database. The system allows the user to change the path using the New Folder functionality or a nightly run batch job. 2. Third-party Application – When the system transmits the documents to a third-party application through a web service based on the indexed information, the third-party application returns a unique number to track and view the document stored on their interface.
T.21.9	System shall provide a central database for forms, with functions for indexing, storage, and retrieval of forms.	No	Vendor	4-Base Product	CTS-Doc has a centralized repository that stores the path to all uploaded documents/forms and stores the uploaded documents/forms on the DMS server. Users can search and retrieve documents based on the indexed information through the Document Search and Document Edit functionalities. Users can also view documents from the inquiry menu of the integrated application.
T.21.10	System shall provide the option for image transmission in real time, and during off-peak periods to accommodate bandwidth, response	No	Vendor	3- Custom	CTS-Doc is highly capable of uploading documents and allowing users to view them when the network bandwidth is high or low.

	time, and other network constraints. Images eligible for delayed or batch transmission are to be determined by NE DMV.				If the user has installed the Client Package, then the documents for a specific type are stored on their system to allow them to upload them later or in real time. During the requirement gathering session, we will understand and document the requirements related to the batch process to upload documents as per NE DMV.
T.21.11	System shall provide the ability to re- scan documents.	No	Vendor	4-Base Product	The CTS-Doc solution provides the ability to rescan documents. The system allows deleting a document using the Document Edit module and rescanning it through the DMS interface.
T.21.12	System shall provide a flexible set of indices which can be defined for the documents. After capture, the documents shall be indexed prior to storing.	No	Vendor	4-Base Product	The CTS-Doc solution stores documents based on the indexed information. The indexed information is defined in the CD_SCREEN_FILED table based on the application types (i.e., IRP, IFTA, etc.).
T.21.13	System shall store document images at a minimum resolution defined by NE DMV.	No	Vendor	4-Base Product	CTS-Doc will limit the storage of documents up to a maximum size as defined in accordance with NE DMV. We will configure the maximum allowable size for document storage in our system.
T.21.14	System shall provide the ability to retrieve all documents within the business defined retention period using one of the indices that are defined and entered for the document in question.	No	Vendor	4-Base Product	The CTS-Doc provides the ability to retrieve archived or purged documents within a pre-defined retention period based on their status such as Active or Archive. We will configure the retention period for the retrieval of archived/purged documents in accordance with NE DMV.
T.21.15	System shall support multi-page, double-sided, and different sized documents.	No	Vendor	4-Base Product	The scan functionality of CTS-Doc allows scanning and upload of multi-page, double-sided, and different documents with ease. The system allows users to change the setting depending on the scanner in use. However, the user must install the Client Package in order to utilize the functionality.

T.21.16	System shall allow NE DMV Users to add free form text comments to a document or image (Annotations).	No	Vendor	4-Base Product	The CMCS solution allows users to add comments related to a document being uploaded on the given screen of the transaction such as Account, Fleet, Vehicle, Billing, etc.
T.21.17	System shall provide the ability to generate a unique identifier which can be used to identify the customer, type of document, and variable data contained within the document. This information shall be stored in a character sequence and in a machine- readable information format (i.e., bar code, QR code, etc.). This functionality is not required, but desired.	No	Vendor	3- Custom	CTS-Doc generates a unique document number that allows tracking and identifying the associated documents with the help of the indexed information such as Customer number, Fleet No., VIN, Document Type, TIN/USDOT, etc., within the integrated system and DMS. We will modify the system to allow bar codes and QR code scanners to read the unique document number to retrieve relevant information.
T.21.18	System shall store forms in standard document formats (i.e., Word document, PDF, etc.).	No	Vendor	4-Base Product	CTS-Doc supports various formats including PDF, JPG, PNG, and GIF for document upload. The system does not support a Word-based document format to prevent users from modifying the document. We urge users to upload a PDF document in place of a Word-based document for security reasons.
T.21.19	System shall allow retrieval and review of all documents by a non-proprietary image viewer (i.e., PDF, JPEG, etc.).	No	Vendor	4-Base Product	CTS-Doc supports retrieval and review of all documents using a non-proprietary viewer to access document formats such as JPG, PNG, PDF, and GIF except Word-based documents.
T.21.20	System shall retrieve forms as overlays for printing and imaging. The retrieved form should be merged with data from the integrated operation database and/or document image database (signatures and photos) to be incorporated as part of outbound notices and correspondence to customers and documents stored in the Contractor's document management system.	No	Vendor	3- Custom	CTS-Doc supports merging data from different documents to create an outbound correspondence to be sent to customers. Such documents will be stored on the DMS server. During the requirements gathering session, we will understand and document the requirements for merging the overlay forms with data such as signatures and photos for generating the outbound correspondence.

T.21.21	System shall be able to access electronic documents and/or image information stored in the central database.	No	Vendor	4-Base Product	CTS-Doc provides the Search functionality to find and access documents based on the indexed information or document number.
T.21.22	System shall retain images of documents produced as part of NE DMV business process.	No	Vendor	4-Base Product	CTS-Doc will retain the document images produced as a part of the NE DMV business process on the DMS application server.
T.21.23	System shall provide for the input and retention of supporting documents (appending pages/documents to an existing document).	No	Vendor	4-Base Product	 CTS-Doc provides the Archive/Purge functionality to retain documents from the DMS application. The system also includes a nightly run batch job that can be scheduled daily, weekly, or monthly to retain the documents based on their status (Active or Archived). Users can append data/documents to an archived document in the DMS application using the Document Edit functionality.

TECHNICAL COMPLETE

	Requirements Traceability Matrix for Option 1: (MMCIS and a document management system) Reporting (R)							
Requirements			Bidder Response Section					
REQ#	Requirement Description	Vendor or Sub	Delivery Method	Explanation				
R.1	General							
R.1.1	System shall provide the ability to produce standard and ad hoc reports.	Vendor	4-Base Product	The CMCS solution allows authorized users to generate standard and ad hoc reports in real-time or near real-time on demand. All reports generated in CMCS are stored in the defined locations.				
R.1.2	System shall provide a help desk function for accessing user logs.	Vendor	4-Base Product	The CMCS solution tracks every transaction including every update to the database. The event-based user activity logging and reporting feature provides information on transactions performed by each user and tracks special activities such as payment connection, VOID payment, and any administrative				

				overrides. The reporting feature provides for the entry of date ranges for the generation of the report. Below is a sample search screen of the user activity report.
R.2	Reporting			
R.2.1	System shall provide the ability to monitor performance of work activities at the user and agency levels.	Vendor	4-Base Product	The CMCS solution tracks every transaction including every update to the database. The Detail User Activity report provides a report for users' or third-party agencies' detailed activity.
R.2.2	System shall provide reporting tools for authorized NE DMV Users supporting predefined, parameterized, and ad hoc query reporting.	Vendor	4-Base Product	The CMCS solution provides ad-hoc querying using a functionality called ad hoc reports. Authorized users can run an SQL query to generate the report in a tabular format that can be exported in excel/CSV format. Below is a sample screen of ad hoc reports whereby a user can run a previously created SQL query.
R.2.3	System shall provide the ability to display customized information on dashboards (i.e., Batch Jobs, System Metrics, Carrier Dashboards, etc.).	Vendor	4-Base Product	The CMCS solution has a customer dashboard that shows the overall status of the customer credentials and status. It also shows any pending transactions for any credential they may

				 have (i.e. incomplete IRP supplements, Daily Inventory usage, etc.). The system provides inventory inquiries and MIS reports that allow users to monitor credential activity. The system also provides the daily inventory usage and availability widget on the user dashboard that allows users to monitor credential activity.
R.2.4	System shall capture transaction information, including but not limited to processing time, approvals, user interactions, modifications for performance evaluation, auditing, and workload analysis.	Vendor	4-Base Product	The CMCS solution provides a facility to store transaction data with a timestamp so processing time can be checked. The system also maintains history based on updating data and user information too.
R.2.5	System shall support rendering reports in formats compatible with all delivery channels including mobile devices. Formats include but are not limited to PDF, HTML, XML, RTF, CSV, Microsoft Word, and Microsoft Excel.	Vendor	4-Base Product	The CMCS solution provides the facility to generate reports in PDF, CSV, and Excel format. The information accessed through Inquiry is displayed in HTML format.
R.2.6	System shall support annotation and format editing of system-generated reports.	Vendor	4-Base Product	The CMCS solution includes a Correspondence module that provides the ability to create and modify templates used for communication, such as email, letters, notifications, text messages, and report templates that includes jurisdiction's letterhead, electronic signatures, jurisdiction names, and addresses.
R.2.7	System shall provide the capability to manage standard report creation, modification, and publishing with role-based access.	Vendor	4-Base Product	The CMCS solution provides the facility to access and generate reports based on user-role permissions.
R.2.8	System shall provide the capability to drill down into system information initially displayed as summary information to view the details of a specific transaction, user action, inventory items, and MC Customer record.	Vendor	4-Base Product	CMCS has an extensive inquiry feature. Based on inquiry type, the system populates search results and allows the user to display current and historical information for an account/Fleet/vehicle by renewal year. The CMCS inquiry functionality provides the Registrant name as one of the search parameters on the search inquiry screen. Below is a sample screen of the CMCS Fleet Inquiry that displays a list of renewal years based on the registrant name.

				The associated tree inquiry on the left-hand side of the screen allows a user to select the specific information required and view the details: Image: tree series Image: tree series Image: tree series Image: tree series
R.2.9	System shall allow authorized NE DMV Users to render data in graphical formats including, but not limited to, bar charts, pie charts, heat maps, and scatter plots (without programming).	Vendor	4-Base Product	The CMCS solution provides User dashboard functionality where the system displays data in the form of pie charts and bar graphs on dashboards, as well as a jurisdiction map for mileage purposes.
R.2.10	System shall highlight anomalies in standard reports based upon information received from the IDR and IFTA Clearinghouse, according to NE DMV business rules.	Vendor	4-Base Product	The CMCS solution manually analysis the anomalies in the standard reports based on the information received from IDR and IFTA Clearinghouse. During the requirement gathering session, we will understand and document the NE DMV rules to come up with functionality to highlight the anomalies in the information from IDR and IFTA Clearinghouse versus the system-generated reports.
R.2.11	System shall provide wizard-style tools for both authorized NE DMV Users and developers to develop reports and dashboards.	Vendor	4-Base Product	The CMCS solution provides a daily scheduled batch process that generates a report and notification letters for unpaid invoices as required. The batch process provides Report and Update option based on the requirement.

R.2.12	System shall provide the ability to schedule report generation based on specified time periods (i.e., real-time, hourly, daily, weekly, monthly, year-to- date, and annually).	Vendor	4-Base Product	The CMCS solution has a batch process to generate or update data based on a specific time and send reports and loggers via email.
R.2.13	System shall support impact analysis; when changes in source data are made, affected downstream reports, dashboards, and system screens will be displayed.	Vendor	3- Custom	 The CMCS solution tracks the changes at the source level and highlights them in red font on the inquiry and verification screens for various transactions. The system also sends notifications to internal users indicating the changes within the system when accessing the impacted functionality. During the requirements gathering session, we will understand and document the requirements to support impact analysis.
R.2.14	System shall provide tools for impact analysis of proposed or possible program changes. The tools shall allow for determining the impact on customer interactions, transaction times, transaction volumes, and staffing, among other items.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirements to provide tools to support impact analysis.
R.2.15	System shall provide the capability to search the report repository, individual reports, and central information repository by keywords.	Vendor	4-Base Product	The CMCS solution provides search and reporting functionality across all modules. The search inputs for all reports and inquiry menus vary depending on the nature of the information being searched. Certain inquiry and report menus allow an auto-complete facility for search fields.
R.2.16	System shall provide tools for forecasting budget, revenue, and staffing needs.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the tools required for forecasting budget, revenue, and staffing needs to customize the system and meet this requirement.
R.2.17	System shall provide the ability for data mining to uncover correlations or patterns.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirements for data mining to customize the system and meet this requirement.
R.2.18	System shall track report usage.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirements for tracking report usage to customize the system and meet this requirement.

R.2.19	System shall provide the capability to create and maintain a report distribution list for each report and group of reports.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirements to provide the capability to create and maintain a report distribution list for each report and group of reports.
R.2.20	System shall allow field masking on reports, such that only designated users can see certain columns, rows, and fields on a report.	Vendor	4-Base Product	The CMCS solution provides the functionality to mask fields on reports and implement role-based access to such reports and the information within.
R.2.21	System shall provide the capability to replicate a report as it was first prepared on an earlier date.	Vendor	4-Base Product	The CMCS solution considers every report instance as an individual instance. The system appends a timestamp to each report file name to ensure distinctiveness.
R.2.22	System shall provide for alerts, at pre-established time intervals, for any system activity, including customer record access, based on NE DMV business rules. Time intervals could include immediate notification, end-of-day notification, or some other set time frame.	Vendor	4-Base Product	The CMCS solution provides the Announcement functionality to set up alerts for various system activities for the required time frame. The system also allows to set up of alerts for different user roles.
R.2.23	System shall support the ability to identify an in- progress transaction for manager audit, randomly or based on other criteria. The system shall allow for the transaction to be suspended pending manager review and approval.	Vendor	4-Base Product	The CMCS Audit Selection functionality allows users to search for in-progress transactions based on the entered criteria. The system flags the audit transaction to cease further processing until the audit is completed.
R.2.24	System shall provide the capability to capture and report meta-data related to any transaction.	Vendor	3- Custom	During the requirement gathering session, we will understand and document the requirements to capture and report meta- data related to any transaction.
R.2.25	System shall provide an easy-to-use interface for NE DMV Users to create and modify reports and correspondence (i.e., allowing users to simply select from a list of available fields, adding/modifying filter criteria, and then placing those fields/etc. onto a layout for a report or letter).	Vendor	4-Base Product	The CMCS solution provides the Correspondence module with an easy-to-use interface to create and modify reports and other correspondence components. Users can modify the existing templates/reports to edit or create new correspondence.

REPORTING COMPLETE

	Requirement Traceability Matrix for Option 1: (MMCIS and a document management system) Interface Catalog (INT)												
	Requirements							Bidder Response					
Req. ID	Description	Function	Туре	Trans. Method	Current Status	Build Responsibility	Proposed Solution	Description	Identify Source (Production or Replicated Database)				
INT.1.0	JD Edwards (E1)											
INT.1.1	IFTA Refunds	A file containing IFTA refunds is created and imported into E1 where the refunds are processed in the State financial system.	File Share	FTPS	Exists	Contractor	A fixed- format text file will be shared through SFTP.	The CMCS solution will provide the ability for the creation of a refund payment fixed-format text file for upload into the JD Edwards (E1) system via a batch job on- demand as well as an option for automatic execution via the Hangfire framework, which uses a REST API provided by the application to	Production				

								execute the	
								process.	
INT 1.2	IRP Refunds	A file containing IRP refunds is	File	FTPS	Does	Contractor	A fixed-	The CMCS	Production
		created and imported into E1	Share		Not Exist		format text	solution will	
		where the refunds will be					file will be	provide the	
		processed in the State					shared	ability for the	
		financial system.					through	creation of a	
							SFTP.	refund	
								payment	
								fixed-format	
								text file for	
								upload into	
								the JD	
								Edwards (E1)	
								system via a	
								batch job on-	
								demand as	
								well as an	
								option for	
								automatic	
								execution via	
								the Hangfire	
								framework,	
								which uses a	
								REST API	
								provided by	
								the	
								application to	
								execute the	
								process.	
INT.1.3	Address Book	A file will be exchanged with	File	FTPS	Does	Contractor	A fixed-	The refund	Production
	Number	E1 for the purpose of	Share		Not Exist		format text	files will be	
	Extract	obtaining the Address Book					file will be	created in	
		Number that is stored in the					shared	INT 1.1 and	
		system and included in the					through	INT 1.2 to	
							SFTP.	share with	

		refund files created in INT.1.1 & INT.1.2.						the JD Edwards (E1) system for extracting address book	
								numbers.	
INT.1.4	ACH Enrollment	A file containing ACH enrollment information is created and imported into E1for the purpose of enrolling carriers to receive ACH payments from the State.	File Share	FTPS	Does Not Exist	Contractor	A fixed- format text file will be shared through SFTP.	The CMCS solution will provide the ability for the creation of a refund payment fixed-format text file for upload into the JD Edwards (E1) system via a batch job on- demand as well as an option for automatic execution via the Hangfire framework, which uses a REST API provided by the application to execute the	Production
INT.2.0	Nebraska Inter	active (NIC)	1	1	<u> </u>	I	I	P. 00000.	

INT.2.1	Web	NIC is the online payment	Intera	Terminal	Exists	Contractor	SOAP/REST	The CMCS	Production
	Payments	portal for all Nebraska	ctive				API	solution	
		Department of Motor Vehicles						allows the	
		web payments. Payments						collection of	
		made on the web interface						payments	
		with NIC to complete the						using	
		payment before marking the						different	
		transaction complete in the						payment	
		MCS system.						types that	
								include credit	
								cards and e-	
								checks. Celtic	
								has extensive	
								experience	
								interfacing	
								the Celtic	
								Payment	
								Processing	
								module with	
								state-	
								provided/thir	
								d-party credit	
								card service	
								providers.	
								Celtic will	
								configure the	
								CMCS	
								payment	
								module to	
								interface	
								with NIC	
								Payment	
								Services.	
								The CMCS	
								payment	

1		1			
				module	
				provides an	
				option for the	
				collection of	
				payments	
				through the	
				electronic	
				payment	
				option. When	
				a user selects	
				the eCheck	
				option, the	
				system will	
				redirect the	
				user to the	
				payment	
				page	
				(provided by	
				a payment	
				gateway	
				service	
				provider).	
				Upon	
				completion	
				of a	
				successful	
				transaction,	
				the user will	
				be redirected	
				back to the	
				CMCS	
				payment	
				page with the	
				appropriate	
				authorization	
				number	
1		1			

								received from the payment gateway service provider.	
INT.3.0	VicToRy		1				T	I	
INT.3.1	NLETS	NLETS inquiries enter the state through the VicToRy system. Apportioned power unit and trailer inquiries are then routed the MCS system where the search is performed, and the results are returned.	Real Time	Web Service	Exists	Contractor	JSON data response will be shared through REST API.	The CMCS solution will provide a REST API that will be consumed by the VicToRy system with passing credentials for authenticatio n. The VicToRy system will initiate a call to the CMCS REST API with a request parameter like Plate Number and the CMCS will respond in JSON format.	Production
INT.3.2	Retrieve Title Information	Retrieve title information from the VicToRy system for the purposes of populating the data on the screen as vehicles	Real Time	Web Service	Exists	Contractor	SOAP/REST API	The CMCS solution will initiate a call to the	Production

		are added to the MCS system. Searches can be performed by title or VIN.						VicToRy system SOAP/REST API with request parameters like Title Number or VIN and retrieve the information to populate it on the screen.	
INT.3.3	Retrieve Validated VIN Information	VIN's are validated by sending them to the VicToRy system where they are then run through the VINtelligence validation process. A "bad" or "not found" response can be returned or the make, year, etc. if found and valid.	Real Time	Web Service	Exists	Contractor	SOAP/REST API	The CMCS solution will initiate a call to the VicToRy system SOAP/REST API with request parameters like VIN and retrieve information like Make, Model, Year, Fuel Type, Axles, Seats, Unladen Weight, etc., and populates it on the screen.	Production

INT.3.4	Batch	A file containing IRP	File	SFTP	Exists	Contractor	A fixed-	The CMCS	Production
	Title/VIN	registrations is created and	Share				format text	solution will	rioduction
	Validation	sent to the VicToRy system					file will be	provide the	
		where either the VIN is					shared	ability for the	
		validated via VINtelligence, or					through	creation of	
		the record is checked to see if					SETP	IRP	
		the title information has					5111.	registration	
		changed The processed file is						data in a	
		returned to the MCS system						fixed-format	
		where the errors are displayed						text file for	
		to the user						checking into	
		to the user.						the Victory	
								system via an	
								system via an	
								batch ich ac	
								well as the	
								well as the	
								option for	
								automatic	
								execution via	
								freme en	
								framework,	
								which uses a	
								RESTAPI	
								provided by	
								the	
								application to	
								execute the	
							_	process.	
INT.3.5	Retrieve	Retrieve GVWR from the	Real	Web	Exists	Contractor	SOAP/REST	The CVIEW	Production
	GVWR	VicToRy system and display it	Time	Service			API	solution will	
		on the Nebraska CVIEW result						initiate a call	
		screen.						to the	
								VicToRy	
								system	
								SOAP/REST	
								API with a	
								request	

6721 Z1 Appendix A- Option 1 - Requirement Traceability Matrix
								parameter like VIN and retrieve the GVWR information to populate it on the screen.	
INT.3.6	Provide IRP Registration Information	IRP registration is provided to the VicToRy system where it is displayed to the user of that system.	Real Time	Web Service	Exists	Contractor	JSON data response will be shared through REST API	The CMCS solution will provide a REST API that will be consumed by the VicToRy system with passing credentials for authenticatio n. The VicToRy system will initiate a call to the CMCS REST API with request parameters and the CMCS will provide the response in JSON format.	Production
INT.3.7	Retrieve County Plated Registration	Retrieve county registration data from the VicToRy system for the purpose of displaying	Real Time	Web Service	Exists	Contractor	SOAP/REST API	The CVIEW solution will initiate a call to the	Production

		this information in the Nebraska CVIEW.						VicToRy system SOAP/REST API with request parameters and retrieve the information to populate it on the screen.	
INT.3.8	Extract IRP Registration Data	A weekly file containing new IRP registrations is created and sent to the VicToRy system where it is included in a registration extract file that is sold to interested 3 rd parties.	File Share	SFTP	Exists	Contractor	A fixed- format text file will be shared through SFTP.	The CMCS solution will provide the ability to create IRP registration data in a fixed-format text file to send it to the VicToRy system via an on-demand batch job as well as the option for automatic execution via the Hangfire framework, which uses a REST API provided by the application to	Production

								execute the	
								process.	
INT.3.9	Provide	A weekly file seeking address	Real	Web	Exists	Contractor	JSON data	The CMCS	Production
	Carrier	information is processed on	Time	Service			response	solution will	
	Address	the VicToRy system. If the					will be	provide a	
	Information	record is not found (by plate)					shared	REST API that	
		in VicToRy a search is					through	will be	
		performed against the MCS					REST API	consumed by	
		svstem.						the VicToRv	
		-,						system with	
								passing	
								credentials	
								for	
								authenticatio	
								n. The	
								VicToRy	
								system will	
								initiate a call	
								to the CMCS	
								REST API with	
								a request	
								parameter	
								like Plate	
								Number and	
								the CMCS	
								solution will	
								provide the	
								response in	
								JSON format.	
INT.4.0	IRP Data Repos	itory (IDR)							
INT.4.1	Upload IRP	Monthly files (data & control)	File	SFTP	Exists	Contractor	JSON file	The CMCS	Production
	Transmittal	containing IRP Transmittal	Share				will be	solution has a	
		data are created and sent to					shared	user interface	
		the IDR.					through	that allows	
							SFTP	the privileged	
								users to run	

								the IRP	
								transmittal	
								nrocess on-	
								demand as	
								well as the	
								ontion for	
								monthly	
								automatic	
								the Hangfire	
								framouvork	
								Tramework,	
								which uses a	
								REST APT	
								provided by	
								the	
								application to	
								execute the	
								process.	
INT.4.2	Upload IRP	A daily file (T0020) containing	File	SFTP	Exists	Contractor	An XML file	The CMCS	Production
	Carrier	new or changed IRP Carrier	Share				will be	solution has a	
	Information	information is created and					shared	user interface	
		sent to the IDR. This file was					through	that allows	
		previously sent directly to					SFTP	the privileged	
		SAFER.						user to run	
								the CVIEW	
								daily process	
								on-demand	
								as well as the	
								option for	
								daily	
								automatic	
								execution via	
								the Hangfire	
								framework,	
								which uses a	
								REST API	
								provided by	

								the application to execute the process.	
INT.4.3	Upload IRP Fleet Information	A daily file (T0021) containing new or changed IRP Fleet information is created and sent to the IDR. This file was previously sent directly to SAFER.	File Share	SFTP	Exists	Contractor	An XML file will be shared through SFTP	The CMCS solution has a user interface that allows the privileged user to run the CVIEW daily process on-demand as well as the option for daily automatic execution via the Hangfire framework, which uses a REST API provided by the application to execute the process.	Production
INT.4.4	Upload IRP Registration Information	A daily file (T0022) containing new or changed IRP Vehicle Registration information is created and sent to the IDR. This file was previously sent directly to SAFER.	File Share	SFTP	Exists	Contractor	An XML file will be shared through SFTP	The CMCS solution has a user interface that allows the privileged user to run the CVIEW daily process on-demand	Production

								as well as the option for daily automatic execution via the Hangfire framework, which uses a REST API provided by the application to execute the process.	
INT.5.1	IFTA Clearingho Upload IFTA Transmittal	Monthly files (data & summary) containing IFTA Transmittal data are created and sent to the IFTA Clearinghouse.	File Share	SFTP	Exists	Contractor	IFTA clearingho use text files (data and summary) will be shared through SFTP.	The CMCS solution has a user interface that allows the privileged users to run the IFTA transmittal process on- demand as well as the option for monthly automatic execution via the Hangfire framework, which uses a REST API provided by the	Production

								application to	
								process	
INT.5.2	Upload IFTA	A daily file containing all IFTA	File	SETP	Exists	Contractor	IFTA	The CMCS	Production
	Demographic	Carriers is created and sent to	Share	••••			demograph	solution has a	
		the IFTA Clearinghouse.					ic text will	user interface	
							be shared	that allows	
							through	privileged	
							SFTP.	users to run	
								the IFTA	
								demographic	
								process on-	
								demand as	
								well as the	
								option for	
								daily	
								automatic	
								execution via	
								the Hangfire	
								framework,	
								which uses a	
								REST API	
								provided by	
								the	
								application to	
								execute the	
					_			process.	-
INT.5.3	Upload IFTA	A daily file containing all IFTA	File	SFTP	Does	Contractor	IFTA decals	The CMCS	Production
	Decals	Decals is created and sent to	Share		Not Exist		text file will	solution has a	
		the IFTA Clearinghouse.					be shared	user interface	
							through	that allows	
							5FTP	the privileged	
								users to run	
								uecais	
					1			process on-	

								demand as well as the option for daily automatic execution via the Hangfire framework, which uses a REST API provided by	
								the application to execute the process.	
INT.6.0	ITD (SAFER)								
INT.6.1	Upload IFTA Carrier Information	A daily file (T0019) containing new or changed IFTA Carrier information is created and sent to the SAFER.	File Share	FTP/VPN	Exists	Contractor	An XML file will be shared through FTP	The CVIEW solution uploads the T0019 transaction file through a scheduled daily batch job to SAFER.	Production
INT.6.2	Download Log Files	Download daily log files from SAFER. This includes the log file for the T0019 sent to SAFER, as well as the log files for the T0020, T0021 and T0022 sent to the IDR (see INT.4.2 thru INT.4.4)	File Share	FTP/VPN	Exists	Contractor	An XML log file will be shared through FTP	The CVIEW solution downloads the T0019- T0022 SAFER log files through a scheduled daily batch job from SAFER.	Production

INT.6.3	Download	Multiple times a day	File	FTP/VPN	Exists	Contractor	An XML file	The CVIEW	Production
	IFTA Carrier	download IFTA Carrier files	Share	-			will be	solution	
		(T0025) from SAFER. This also					shared	downloads	
		includes the monthly IFTA					through	the T0025	
		Carrier (T0025) baseline files.					FTP	transaction	
								file through a	
								scheduled	
								daily batch	
								job from	
								SAFER.	
INT.6.4	Download IRP	Multiple times a day	File	FTP/VPN	Exits	Contractor	An XML file	The CVIEW	Production
	Carrier	download IRP Carrier files	Share	,			will be	solution	
		(T0026) from SAFER. This also					shared	downloads	
		includes the monthly IRP					through	the T0026	
		Carrier (T0026) baseline files.					FTP.	transaction	
								file through a	
								scheduled	
								daily batch	
								job from	
								SAFER.	
INT.6.5	Download IRP	Multiple times a day	File	FTP/VPN	Does	Contractor	An XML file	The CVIEW	Production
	Fleet	download IRP Fleet files	Share		Not Exist		will be	solution	
		(T0027) from SAFER. This also					shared	downloads	
		includes the monthly IRP Fleet					through	the T0027	
		(T0027) baseline files.					FTP	transaction	
								file through a	
								scheduled	
								daily batch	
								job from	
								SAFER.	
INT.6.6	Download IRP	Multiple times a day	File	FTP/VPN	Exists	Contractor	An XML file	The CVIEW	Production
	Registration	download IRP Vehicle	Share				will be	solution	
		Registration files (T0028) from					shared	downloads	
		SAFER. This also includes the					through	the T0028	
		monthly IRP Vehicle					FTP	transaction	
		Registration (T0028) baseline						file through a	
		files.						scheduled	

INT.6.7	Download MCMIS	Multiple times a day download MCMIS files (T0031) from SAFER. This also includes the monthly MCMIS (T0031) baseline files.	File Share	FTP/VPN	Exists	Contractor	An XML file will be shared through FTP	daily batch job from SAFER. The CVIEW solution downloads the T0031 transaction file through a scheduled daily batch job from	Production
INT.6.8	Download L&I	Multiple times a day download L & I files (T0032) from SAFER. This also includes the monthly L & I (T0032) baseline files.	File Share	FTP/VPN	Exists	Contractor	An XML file will be shared through FTP	SAFER. The CVIEW solution downloads the T0032 transaction file through a scheduled daily batch job from SAFER.	Production
INT.6.9	Download Vehicle Inspection	Multiple times a day download Vehicle Inspection Detail files (T0033) from SAFER. This also includes the monthly Vehicle Inspection Detail (T0033) baseline files.	File Share	FTP/VPN	Does Not Exist	Contractor	An XML file will be shared through FTP	The CVIEW solution downloads the T0033 transaction file through a scheduled daily batch job from SAFER.	Production
INT.6.10	Download UCR	Multiple times a day download UCR files (T0034) from SAFER. This also includes	File Share	FTP/VPN	Does Not Exist	Contractor	An XML file will be shared	The CVIEW solution downloads	Production

		the monthly UCR (T0034) baseline files.					through FTP.	the T0034 transaction file through a scheduled daily batch job from SAFER.	
INT.6.11	Download PRISM Targeted Vehicles	Download daily PRISM Targeted Vehicle file from SAFER.	File Share	FTP/VPN	Exists	Contractor	An XML file will be shared through FTP.	The CVIEW solution downloads the T0041 and T0042 transaction files through a scheduled daily batch job from SAFER.	Production
INT.7.0	DB Software								
INT.7.1	IRP Audit Extract	An extract file of IRP audit data is created on demand and sent to a location where it is imported into DB Software.	Real Time	SFTP	Exists	Contractor	CSV file will be shared through SFTP.	The CMCS solution allows for the creation of an IRP audit CSV file for upload into the DB Software system.	Production

								the DB Software	
								system.	
INT.8.0	Werner Enterp	rises				1	1		L
INT.8.1	Cab Card File (.tif)	As cab cards are printed for Werner Enterprises a .tif image file of those cab cards is sent to the Werner Enterprises system and imported into their imaging system.	Real Time	FTP/VPN	Exists	Contractor	The image file (.tif) will be shared through SFTP.	The CMCS solution will capture the indicator flag to allow for the creation of the cab card .tif image file to upload into the Werner system. Carrier's FTP path will be configurable in the system. During the requirements gathering sessions, Celtic will understand and document the NE DMV's requirements and configure the system.	Production

INIT Q 1	Common &	A weekly file containing	Filo	ETD	Evicto	Contractor	The file will	The CMCS	Production
INT.9.1	Contract	A weekly life containing	Chara	115	LAISUS	Contractor	he chared	colution will	FIGURE
	Contract		Share				besnareu		
	Carriers	Information is created by the					through	provide the	
		Department of Revenue and					SETP.	ability to	
		sent and stored on the MCS						receive the	
		system.						file from the	
								Department	
								of Revenue	
								through SFTP	
								and upload it	
								to the MCS	
								database via	
								a user	
								interface	
								batch iob on-	
								demand as	
								well as the	
								ontion for	
								weekly	
								automatic	
								the llangfire	
								the Hangilre	
								framework,	
								which uses a	
								RESTAPI	
								provided by	
								the	
								application to	
								execute the	
								process.	
INT.10.0	NCJIS								
INT.10.1	Provide IRP	Create a process to share IRP	File	SFTP	Does	Contractor	A fixed-	The CMCS	Production
	Registration	& IFTA data to the NCJIS	Share		Not Exist		format text	solution will	
	Information	system. The NCJIS system					file will be	provide the	
		provides a law enforcement					shared	ability for the	
								creation of	

tool to Nebraska law		through	IFTA and IRP
enforcement.		SFTP	data fixed-
			format text
			files for
			uploading
			into the NCJIS
			system via an
			on-demand
			batch job as
			well as the
			option for
			automatic
			execution via
			the Hangfire
			framework,
			which uses a
			REST API
			provided by
			the
			application to
			execute the
			process.

INTERFACE CATALOG COMPLETE

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Corporate Overview Bidder Identification and Information The bidder shall provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in

which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

Bidder response:

Celtic Cross Holdings, Inc., dba Celtic Systems, is an S-type Corporation incorporated in the State of Arizona on January 4, 2003. Celtic is headquartered at 8961 E Bell Road, Suite 101, Scottsdale, AZ 85260.

1.	Corporate Overview
	j. Financial Statements
2.	The bidder shall provide financial statements applicable to the firm. If publicly held, the bidder shall provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.
	If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, shall be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm shall provide a banking reference.
	The bidder must disclose any and all judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.
	The State may elect to use a third party to conduct credit checks as part of the corporate overview evaluation.

Bidder response:

About Celtic:

The following table provides information related to Celtic's identification and Information:

Company Name	Celtic Cross Holdings, Inc dba Celtic Systems
Address of the company's headquarter	8961 E Bell Road, Suite 101, Scottsdale, AZ 85260
Entity Type	Corporation
State of Incorporation	Arizona

 Registration Year
 2003

Since 2003, Celtic Systems (Celtic) has been a successful developer of enterprise solutions for Motor Vehicle Administrations throughout the United States and Canada. Our core enterprise platform, Celtic Transportation Services Hub (CTS-Hub[™]), along with our flagship motor vehicle product line, has been successfully implemented in multiple jurisdictions on schedule and within budget every time!



Figure 1 Celtic Transportation Services Hub (CTS-Hub)

Celtic is in its 20th year of business, serving Motor Vehicle Administrations, providing system development, implementation, support services, operations, support, and maintenance.

The founders and senior staff members have decades of relevant Motor Carrier Solutions (including IRP, IFTA, CVIEW, IRP/IFTA Permits, OS/OW Permit and Automated Routing, DMS, OPA, Fuel Tax, Vehicle Registration, Business Licensing, and DL Issuance) experience and have grown organically since inception by adding experienced staff from both the private and public sectors. In addition, Celtic has created a network of advisors drawn from former jurisdictional motor vehicle agency administrators to provide a unique customer/client perspective.

Providing Motor Vehicle agency technology solutions has been the core business of Celtic. We have not only re-engineered and modernized the products and services offered by our company but have also developed a deep understanding and appreciation of the entire business and technical environments of dozens of Motor Vehicle Agencies.

Celtic has successfully implemented our COTS Solution in sixteen States and two Provinces on schedule and within budget. Our solution is operational in all the Jurisdictions as described in the table below:

Customer Name				Detai	Details of Work Performed						
	IRP	IFTA	IRP/IFTA Audit	IRP/IFTA Permits	CVIEW	PRISM & CVISN Compliant	DMS	Hosting Option			
Montana Department of Transportation	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure Gov. Cloud			
Alabama Department of Revenue	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark				
Missouri Department of Transportation	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure Gov. Cloud			
Florida Highway Safety - Motor Vehicles Department <i>(under construction)</i>	✓	√	\checkmark	\checkmark	\checkmark	\checkmark	√				
West Virginia Department of Motor Vehicles	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark					

Arkansas Department of	\checkmark	\checkmark	\checkmark			\checkmark		
Revenue								
Wyoming Department of	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Transportation								
Kansas Department of Revenue	\checkmark		\checkmark			\checkmark		
Idaho Department of	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Azure Gov.
Transportation								Cloud
District of Columbia	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	
Department of Motor Vehicles								
Connecticut Department of	\checkmark		\checkmark			\checkmark	\checkmark	
Transportation								
Ohio Department of	\checkmark		\checkmark			\checkmark		
Transportation								
Alberta Transportation	\checkmark		\checkmark			N/A	\checkmark	Azure Gov.
								Cloud
Tennessee								

Financial Statements:

Below are the most recent audited annual financial statements:

	Amount (\$)	Amount (\$)
Service Revenue		16,605,574
Employee Compensation & related expenses	3,917,113	
Contractor Service Charges	1,631,105	
Cloud Services	317,627	
Communication Expense	28,166	
Dues, License & Software	178,598	
Professional Fees	106,714	
Depreciation	70,279	
Iravel	14,153	
Fuel, Vehicle Maintenance & related expenses	12,155	
Insurance	229,145	
Marketing & Business Promotion	378,948	
Sunding Maintenance	58,119	
Total Expenses	41,790	6,983,912
Income from Operations	-	9,621,662
Other Income (Expense)		
Interest Income	1,740	
Income from Rent from employees	5,400	7,140
Net Income before Income Tax	-	9,628,802
Income Tax		1,651,856
Net Income	-	7,976,946
Other Comprehensive income (loss)		
Foreign currency translation (loss)	70,317	
Other Comprehensive (loss) Total		70,317

CELTIC CROSS HOLDINGS, INC and SUBSIDIARY

Consolidated Balance Sheet as o	n December 31,2021
A	Amount (\$)
Assets	
Current Assets	
Cash	9,189,677
Trade Accounts Receivable, less Allowance	3,415,020
Unbilled Revenue	371,151
Prepaid Expenses	25,180
Loans & Advances	29
Deposits & Other Assets	9,733
Total Current Assets	13,010,790
Due from Related Party	4,361,190
Property & Equipment, Net	1,515,253
Total Assets	18,887,233
iabilities and Stockholders' Equity	
Current Liabilities	
Accrued Expenses	216,720
Accounts Payable	138,618
Unearned Income	1,652,160
Total Current Liabilities	2,007,498
Income Tax Payable	1,651,856
Total Liabilities	3,659,354
Stockholders' Equity	15,227,880
Total Liabilities and Stockholders' Equity	18,887,234

Banking Reference:

6721 Z1 Appendix B (Option 1) MMCIS Modernization

Daniel Nelson (Private Client Banker) Chase Bank (16852 N Thompson Peak Pkwy, Scottsdale, AZ 85260) Phone No: 480-845-6957

Celtic does not have any judgements, pending or expected litigations, or financial reversals.

<u>Confidential</u>: Celtic's financial statements should be treated as confidential information.

1. Corporate Overview	
k. Change of Ownership	

3. If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder shall describe the circumstances of such change and indicate when the change will likely occur. Any change of ownership to an awarded bidder(s) will require notification to the State.

Bidder response:

Celtic anticipates no change in ownership or control of the company during the twelve (12) months following the proposal due date. In case any changes occur or are likely to occur, Celtic assures to notify the State of Nebraska about the changes.

1. Corporate Overview I. Office Location

4. The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska shall be identified.

Bidder response:

Our headquarters at the following location can be contacted for performance pursuant to the award of the contract with the State of Nebraska:

8961 E Bell Road, Suite 101, Scottsdale, AZ 85260; 480-682-3791 (Office); 480-991-4200 (Fax).

1. Corporate Overview m. Relationship with the State

5. The bidder shall describe any dealings with the State over the previous five years. If the organization, its predecessor, or any Party named in the bidder's proposal response has contracted with the State, the bidder shall identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

Bidder response:

Celtic has not dealt with the State of Nebraska over the past five years.

1. Corporate Overview n. Bidder's Employee Relations to State

6. If any Party named in the bidder's proposal response is or was an employee of the State within the past 36 months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a subcontractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

Bidder response:

No Celtic employee currently is or in past was associated with the State of Nebraska over the past 36 months.

1. Corporate Overview o. Contract Performance

7. If the bidder or any proposed subcontractor has had a contract terminated for default during the past 10 years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's non-performance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past 10 years, including the other Party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past 10 years, so declare.

If at any time during the past 10 years, the bidder has had a contract terminated for convenience, non-performance, nonallocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting Party.

Bidder response:

Celtic has never terminated a contract with the State of Nebraska over the past 10 years.

1. Corporate Overview

p. Summary of Bidder's Corporate Experience

 The bidder shall provide a summary matrix listing the bidder's previous projects similar to this solicitation in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

The bidder shall address the following:

i. Provide narrative descriptions to highlight the similarities between the bidder's experience and this solicitation. These descriptions shall include:

- a) The time period of the project,
- b) The scheduled and actual completion dates,
- c) The Bidder's responsibilities,

d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and

e) Each project description shall identify whether the work was performed as the prime Bidder or as a Subcontractor. If a bidder performed as the prime Contractor, the description shall provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.

ii. Bidder and Subcontractor(s) experience shall be listed separately. Narrative descriptions submitted for Subcontractors shall be specifically identified as Subcontractor projects.

iii. If the work was performed as a Subcontractor, the narrative description shall identify the same information as requested for the Contractors above. In addition, Subcontractors shall identify what share of contract costs, project responsibilities, and time period were performed as a Subcontractor.

Bidder response:

Reference #1

Client: Alabama Department of Revenue

Project: Motor Carrier Solution

Dates of Service: April 2007 to October 2008 for initial Implementation

Re-modernization/Replacement in April 2018 with ongoing support and maintenance.
Budget: \$5.5 – 7M (including modernization and ongoing support and maintenance for five years)
Services Provided:
Celtic was awarded the Alabama Department of Revenue CMCS Project that included an integrated solution for IRP, IFTA, IRP/IFTA Audit, Trip Permits, CVIEW, Document Management System, and Learning Management System.
The system was implemented as per the project plan and was within the allocated budget.
In 2018, Celtic implemented a new version of the system consisting of modernized UI/UX with major changes to support their infrastructure upgrades.
Celtic continues to support and maintain the integrated solution for Alabama.
Client Contact Name: David Baxley
Client Contact Role in the Project: Manager (Motor Vehicle Division)
Client Contact Phone #: 334-242-9669
Client Contact Email: david.baxley@revenue.alabama.gov
Alternate Contact Name: Trishawn Bell (Business Analyst)
Alternate Contact Phone # 334-242-9621
Alternate Contact Email: trishawn.bell@revenue.alabama.gov

Reference #2

Client: West Virginia Department of Motor Vehicles
Project: West Virginia dmvFirst
Dates of Service: October 2017 – ongoing Support and Maintenance
Budget: \$7 – 7.5M (including modernization, and on-going support and maintenance for five years)

Services Provided:

Celtic implemented its Motor Vehicle Solution (CMVS) solution for the West Virginia project named "dmvFIRST" to replace Driver's Licensing and Title and Registration services at the counter and back-room transaction processing to meet customer needs. As customers request services at the counter, dmvFIRST will access the customer account for detailed customer information and, depending on the type of transaction (T&R new Registration, renewal, D/L renewal, new D/L, etc.), will calculate the fees for services, provide for the collection of those fees, track all transactions, provide a reconciliation process for the cash drawer, and issue the appropriate inventory for Headquarters and 24 field office statewide.

The volume of yearly transactions completed

2.2 million

Work accomplished

Our most recent relevant experience that qualifies Celtic is our implementation of the West Virginia Title and Registration and Driver's License System in 2015. West Virginia had an antiquated system for processing customer facing transactions dating back over 30 years. Celtic implemented their CMVS COTS solution to replace services at the counter to meet customer needs.

The project provided the following functionality:

1. Driver's License	2. Title and Registration
a) Fee Calculation	a). Title # Issuance
b) Payment Collection	b) Plate Issuance
c) Handicap Placard	c) Fee Calculation
	d) Payment Collection
3. Dealer Licensing	4. Dealer License Application
a) Bulk Plate Issuance	a) Fee Calculation

	b) Fee Calculation	b) Payment Collection
	c) Payment Collection	
5.	Inventory	6. <u>Finance</u>
	a) Inventory Ordering	a) Cash drawer
	b) Inventory Management	b) Payment collection
	c) Inventory Issuance	c) Fees distribution
		d) Reconciliation and Daily deposit
7.	Hearings and Convictions	
	a) Fee Calculation	
	b) Payment Collection	
As cus provic and 24	tomers request services at the counter les for the collection of those fees, and 4 field offices statewide.	, dmvFIRST calculates the fees for services, issues the appropriate inventory for Headquarters
In add	lition, we implemented:	
•	• The COTS IRP and IFTA modules with iLearn for training internal and external users on how to use these modules.	
•	• Our Mobile Driver module for linking applications to smart devices (phones, iPads, tablets) allows external users to perform DMV business without visiting a DMV office, all while going about their normal days' work.	
•	• Our COTS browser-based training system (iLearn) for training field office personnel for driver testing certification and certification renewal courses involving PowerPoint, Textual, video, and sound components.	

Client Contact Name: Linda Ellis

Client Contact Role in the Project: Project Manager (currently Deputy Commissioner)

Client Contact Phone #: 304-926-0716	
Client Contact Email: linda.k.ellis@wv.gov	
Alternate Contact Name: Steve Monroe	
Alternate Contact Phone # (304) 352-5948	
Alternate Contact Email: steven.e.monroe@wv.gov	

Reference #3

Client: Kansas Department of Revenue

Project: Kansas Commercial Vehicles Registration System (KCoVRS)

Dates of Service: January 2014, with ongoing support and maintenance

Budget: \$4 – 4.5M (including modernization, and on-going support and maintenance for five years)

Services Provided:

Celtic implemented a CMVS Intrastate Commercial Vehicle Registration system across 105 counties in Kansas with a Document Management module for the collection of required registration documents. This module forms part of our T&R system COTS product used for regular and commercial motor vehicles. This system processes over 440,000 transactions annually.

Commercial Motor Vehicle registration systems are more complex than regular vehicle registrations due to legislated requirements for compliance, but they have less interfaces, and the volume is relatively low.

High volumes of data and a high number of interfaces require powerful transaction processors and powerful servers supporting a solid Service Oriented Architecture utilizing web services.

We also implemented:

• The Celtic COTS IRP System in 8 field offices and headquarter for internal and external users.

- IRP Titling module.
- The Celtic COTS browser-based training system (iLearn) for training both internal and external users on how to use the system.

Client Contact Name: David Harper

Client Contact Role in the Project: Director

Client Contact Phone #: 785-296-0553

Client Contact Email : <u>david.harper@ks.gov</u>

Alternate Contact Name: Grace Toelkes (CMV Supervisor)

Alternate Contact Phone #: 785-368-6608

Alternate Contact Email: grace.toelkes@ks.gov

1. Corporate Overview

h. Summary of Bidder's Corporate Experience

9. The bidder is required to have an operational IRP, IFTA, and CVIEW information system in at least one jurisdiction at the time of proposal submission.

The bidder shall address the following:

i. Provide narrative descriptions to highlight the similarities between the bidder's experience and this solicitation. These descriptions shall include:

- a) The time period of the project,
- b) The scheduled and actual completion dates,
- c) The Bidder's responsibilities,

d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and

e) Each project description shall identify whether the work was performed as the prime Bidder or as a Subcontractor. If a bidder performed as the prime Contractor, the description shall provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.

ii. Bidder and Subcontractor(s) experience shall be listed separately. Narrative descriptions submitted for Subcontractors shall be specifically identified as Subcontractor projects.

iii. If the work was performed as a Subcontractor, the narrative description shall identify the same information as requested for the Contractors above. In addition, Subcontractors shall identify what share of contract costs, project responsibilities, and time period were performed as a Subcontractor.

Bidder response:

Reference #1

Client: Alabama Department of Revenue

Project: Motor Carrier Solution

Dates of Service: April 2007 to October 2008 for initial Implementation

6721 Z1 Appendix B (Option 1) MMCIS Modernization

Re-modernization/Replacement in April 2018 with ongoing support and maintenance.
Budget: \$5.5 – 7M (including modernization and ongoing support and maintenance for five years)
Services Provided:
Celtic was awarded the Alabama Department of Revenue CMCS Project that included an integrated solution for IRP, IFTA, IRP/IFTA Audit, Trip Permits, CVIEW, Document Management System, and Learning Management System.
The system was implemented as per the project plan and was within the allocated budget.
In 2018, Celtic implemented a new version of the system consisting of modernized UI/UX with major changes to support their infrastructure upgrades.
Celtic continues to support and maintain the integrated solution for Alabama.
Client Contact Name: David Baxley
Client Contact Role in the Project: Manager (Motor Vehicle Division)
Client Contact Phone #: 334-242-9669
Client Contact Email: david.baxley@revenue.alabama.gov
Alternate Contact Name: Trishawn Bell (Business Analyst)
Alternate Contact Phone # 334-242-9621
Alternate Contact Email: trishawn.bell@revenue.alabama.gov
q. Summary of Bidder's Proposed Personnel Management Approach

10. The bidder shall present a detailed description of its proposed approach to the management of the project.

The bidder shall identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this solicitation. The names and titles of the team proposed for assignment to the State project shall be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person shall also be identified. Bidder shall describe for all key project personnel proposed, relevant IRP and IFTA experience.

The bidder shall provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the solicitation in addition to assessing the experience of specific individuals.

Resumes shall not be longer than three (3) pages. Resumes shall include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.

Bidder response:

Celtic will leverage Project Management's best practices applicable to the Agile framework. Celtic will onboard a seasoned Project Manager with extensive experience in managing similar projects. The Project Manager will work in collaboration with the NE DMV project manager counterpart from the start of the project through go-live while working with NE DMV in collaboration for tracking and ensuring the quality throughout the project duration and to ensure that the program is delivered on time and within budget. The Project Manager will be supported by the Functional team, Development, and PMO team to ensure the successful execution of the Agile releases.

The below diagram provides a 3-tiered governance view, with stakeholders involved and a focus on outcomes.

The Celtic Project Management framework (based on the Project Management Institute's PMBOK) will be used to plan and execute this program. The framework organizes project management processes into four main phases linked by the results they produce—the result or outcome of one becomes an input to another. It provides for well-defined deliverables, entry and exit criteria, and activity definitions

in each of these phases.

What	Who	Cadence	Outcomes
Portfolio Value Steams Strategic Themes Epic Discovery Budget/Funding	Steering Committee	 Quarterly or as decisions are needed 	 New value targeted Prioritized epics Understanding of MVP Investment decisions
 Program Program backlog Group of 5 sprint teams Architectural runway Simple budgets 	 Project Manager and PMO / RTE Product Management System Architects SME and Leads 	 Program Increment 	 Value Achievement Commitment (Current PI) Alignment Release on demand
Team Team backlogs Develop on cadence Stories, spikes, refactoring Traditional sprint teams 	 Development team Scrum master Product owner 	• 2 week sprints	 Working software – value delivered Code quality Continuous release

The four main phases follow a rigorous structure to plan, execute, control, and close the nine Project Management core processes as depicted in the picture. The Project Management Office (PMO) manages the processes. The four PMO phases are specific to project management and can be applied to any Project Lifecycle model.



A process-centric perspective is provided to the Project Management framework by the nine core processes of Scope, Time, Cost, Quality, Resource, Communication, Risk/Issue, Performance, and Vendor Management.

These core process areas are aligned with the Agile execution framework.

6721 Z1 Appendix B (Option 1) MMCIS Modernization

• Scope Management: Scope Management ensures that the project includes all the work required to complete it successfully.

Key Scope Management activities include:

- Prioritize Portfolio backlog
- Split epics, prioritize features
- Prioritize Product backlog
- Prioritize team sprint backlog
- **Time Management:** Time Management ensures the timely delivery and completion of the project. Key time management activities include:
 - Fixed Sprints and Program Increment durations
 - Frequent backlog grooming
 - Prioritize user stories
 - Observed team velocity
 - o User stories sized based on Agile estimation techniques
 - Team members commit to the sprint backlog
- **Cost Management:** Cost Management ensures that the project is completed within the approved budget. Key cost management activities include:
 - Plan Agile Release Train (ART) Funding
 - Allocation based on customer demand
 - Determine the Agile Release Train budget
 - Control costs at a Program Increment boundary

- **Quality Management:** Quality Management ensures that the project adheres to the quality standards as planned. Key Quality management activities include:
 - Definition of ready
 - Behavior-driven development (BDD) / Test-driven development (TDD)
 - Continuous integration
 - Definition of Done / Pair testing
- **Resource Management:** Resource Management ensures the most effective utilization of resources for the project. Key Resource management activities include:
 - o Evaluate team capacity
 - Dedicated teams assigned
 - Retrospectives and continuous learning by teams
 - Self-organized teams
- **Communication Management:** Communication Management ensures an ongoing cycle of collecting and disseminating

project information. Key Communication management activities include:

- Setting up a Governance model for the program
 - Identify business owners
 - Align to a common vision
 - Frequent collaboration and team agreements
- \circ $\;$ The daily stand-up meeting, sprint demos, and retrospective meetings
- Publish work status
- Highly collaborative environment; lean portfolio metrics published regularly

- **Risk & Issues Management:** Risk & issues Management ensures the identification, analysis, and resolution of project risks and issues. Key Risk & Issue management activities include:
 - Deliver in small increments; mid Program increment reviews
 - Fishbone and 5 Why techniques to analyze impediments
 - o Regular Scrum of Scrum meetings to identify impediments
 - o Swarm and proactively resolve impediments
- Integration/Performance Management: The Release Train Engineer (RTE) and the PMO team capture agile metrics at period intervals to track the progress of the agile release train. The metrics are captured at sprint, release, and project levels.
 Representative metrics include:
 - Sprint Velocity
 - o Sprint Defect density
 - o Release Productivity
 - Release defect density
 - Release effort variance
 - Project Productivity in story points
 - o Project defect density
 - Project schedule variance
- **Procurement/Vendor Management:** Procurement/Vendor Management ensures the acquisition of services and goods for successful project completion. Key Procurement management activities include:
 - Establish strategic relationships
 - Develop business partnerships

- Align with Lean and Agile practices
- Close contracts

The following pertinent skills matrix shows the motor vehicle systems-specific experience that Team Celtic brings to the project. Our staff has been dedicatedly working in the DMV space for over twenty years. The combined experience of the team is over 1000 years.

The individuals listed below with ** are key team members for the implementation project. Resumes of Executive Sponsors and oversight roles are not included.

Team Member	Role and Responsibilities	Backup
Bhaskar Chakravarty Project Sponsors		Joe McCormick
Samir Nayak	Engagement Manager	Manish Gohil
Manish Gohil **	Single Point of Contact	Sandeep Contractor
Debdas Bhattacharya Senior Project Manager **		Manish Gohil
Deb Wiley **	Senior Business Architect	Vijay Rajan
Nirav Shah **	Senior Technical System Architect	Murugan Kumaraswamy
Tom Stack **	Senior Database Analyst	Sandeep Contractor
Rajib Chatterjee **	Testing Coordinator	Shweta Chatterjee
Sherri Black **	Training Coordinator	Shweta Chatterjee

RESUMES OF KEY TEAM MEMBERS

Name:	Manish Gohil	
Project Role:	Single Point of Contact	
Project Responsibilities: Mr. Gohil has over 15 years of extensive knowledge in the areas of Motor Vehicle and Motor Carrier Solutions with end-to-end project management, system development, and system integration experience. Mr. Gohil has been a key player across multiple complex state modernization projects. Mr. Gohil possesses excellent skills and experience, including:		
 Leading cross-functional teams for significant business transformation initiatives while implementing Celtic's COTS product suites for multiple Motor Vehicle Administrations Achieving project goals by managing scope, risks, issues, dependency, decisions, and action items 		
 Resource forecasting and billing to e Ensured that business intentions we architecture 	ensure the project adheres to budget and schedule are aligned with the BI strategy and future state	
 Communicating project status with the team, stakeholders, and leadership; supported multiple roles to meet deadlines 		
 Organized technical sessions with the client's technical team to discuss and document interfaces with the Jurisdiction's enterprise systems and services Eacilitate Conversion of data and documents from Legacy Systems 		
Mr. Gohil has successfully Implemented Motor Vehicle and Motor Carrier Solutions in the following Jurisdictions:		
 Arizona, South Carolina, Iowa, Ontai Ohio, Alberta, and British Columbia. 	rio, Kansas, Georgia, Montana, Wyoming, Idaho,	
Proiect Reference:		

Project Name	Kansas Commercial Vehicle Registration System (KCoVRS)
Customer Name	Kansas Department of Revenue

Contact Information	Lisa Kaspar (Director – currently retired)	
785.383.3172 dlkaspar@yahoo.com		
Role and Key Responsibilities		
Senior Project Manager		
 Develop a fully resource-loaded project schedule that includes tasks, subtasks, dependencies, begin and end dates by phase, and major milestones and deliverables from project inception to completion Create and archive formal correspondence, deliverables, and invoices Provide weekly, monthly, and annual status reports Track and log project issues and risks Gather performance metrics and prepare reports Analyze performance information and trends, identify risks and issues regarding performance and compliance, and recommend mitigations, decisions, and actions to the Project Manager Coordinate the roll-on and roll-off of staff, logistics, and contact lists 		
Project Period January 2014, with ongoing support and maintenance		
Project Description: Celtic implemented the CMVS Intrastate Commercial Vehicle Registration system across 105 counties in Kansas with a Document Management module for the collection of required registration documents. This module forms part of our T&R system COTS product used for regular and commercial motor vehicles. This system completes over 440,000 transactions annually.		
Commercial Motor Vehicle registration systems are much more complex than regular vehicle registrations due to legislated requirements for compliance, but volumes and interfaces are much fewer.		
High volumes of data and a larg	e number of interfaces require powerful transaction	

web services.

In addition, we implemented:

- IRP Titling module
- The Celtic COTS IRP System in 8 field offices and headquarter for both internal and external users
- The Celtic COTS browser-based training system (iLearn) for training both internal and external users on how to use the system

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Bachelor of Engineering (B.E.) in Computer Science	M.S. University of Baroda, India	2001
Certified Scrum Master	Scrum Alliance	2019

Other experience or background information:

•	Platforms/Environment	Linux, Windows, MS-DOS, ADAM/AD, AZMAN, Azure, Cloud computing
•	Other Tools	MS Project, MS SharePoint, MS Visio, MS Office, Jira, and Azure DevOps

Name:	Debdas Bhattacharya	
Project Role:	Senior Project Manager	
Project Responsibilities: Mr. Bhattacharya possesses over 20 years of experience from conceptualization through delivery, continually evaluating processes, identifying inefficiencies, and implementing improvements. He continues to Design, Analyze, Develop, and Maintain systems to optimize operations and facilitate operational planning on time.		
 Mr. Bhattacharya possesses excellent sk Experience in both Technical and IT Experience in Agile, Waterfall, Increa Managing risks and issues. Preparing risk mitigation plans and I Project Planning, capacity planning, utilization. Managing multiple projects and larg Project management and collaborat and SharePoint) 	ills, including: Project Management work streams mental, and iterative development methodologies ogs resource planning, allocation, and resource ge development teams. ion tools (Microsoft Teams, JIRA, MS Project, Visio,	
 Mr. Bhattacharya is Managing our COTS Solutions in the following Jurisdictions: Missouri Department of Transportat Florida State Department of Highwa 	products suites for Motor Vehicle and Motor Carrier tion v Safety (Motor Vehicle Division)	

Project Reference:

Project Name	Credentialing System
Customer Name	Missouri Department of Transportation (MoDOT)
Contact Information	Nathan Fontaine (Project Manager)

	573.522.1353 Nathan.Fontaine@modot.mo.gov		
Role and Key Responsibilities Senior Project Manager			
 Manage day-to-day project activities for sprint delivery Execute change management controls and procedures in coordination with MoDOT Manage project resources and coordinate the availability of resources to meet project deadlines Collaborate with MoDOT to report and mitigate project issues and risks Develop and implement a QA process to confirm deliverable quality, milestones are achieved, and stakeholders are satisfied Responsible for activities of the project team, including coordination, communication, issue tracking/resolution, scope management, change management, status reporting, QA and auditing deliverables 			
Project Period June 2020 - February 2022, with ongoing support and maintenance			
 Project Description: A turn-key Motor Carrier Credentialing Solution for the Missouri Department of Transportation (MoDOT). This includes all necessary design, development, implementation, customization, configuration, installation, training, and ongoing maintenance and support to address the business and technical needs, including the following components: a) A comprehensive, integrated system for: 1) the processing and administration of commercial vehicle apportioned registration under the International Registration Plan 			

- commercial vehicle apportioned registration under the International Registration Plan (IRP); 2) fuel use tax licensing and reporting functionality for motor carriers under the International Fuel Tax Agreement (IFTA); 3) Operating Authority (OPA) to include House movers licensing within the module and 4) IRP/IFTA related audit functions, hereinafter referred to as the Motor Carrier Credentialing Solution.
- b) An interface to the Celtic comprehensive Commercial Vehicle Information Exchange Window (CVIEW) system for the exchange of data within the state related to commercial vehicle credentialing and tax systems. This information includes portions

of the interstate carrier vehicle and driver snapshots and other reports for exchange within the state, including to roadside sites. The CVIEW System also exchanges data with the Safety and Fitness Electronic Records System (SAFER), that is compliant with the Federal Motor Carrier Safety Administration (FMCSA) Commercial Vehicle Information Systems and Networks (CVISN) program.

c) Azure Government Cloud Hosted Solution.

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Project Management Professional (PMP)	Project Management Institute, USA	2005
Master of Technology (MTech.) in Computer Science	University of Calcutta, West Bengal, India	1985
Bachelor of Technology (B.Tech.) in Computer Science	University of Calcutta, West Bengal, India	1982
Bachelor of Science (B.Sc.) in Mathematics	University of Calcutta, West Bengal, India	1979

Other experience or background information:

Other Tools	MS Project, MS SharePoint, MS Visio, MS Office
	tools, CASE Tool, Jira, and Azure DevOps

Name:	Deb Wiley
Role Name:	Senior Business Architect

Project Responsibilities: Ms. Wiley has 24 years of experience in all aspects of Motor Vehicle Administration, including working knowledge of Driver Licensing, Driver Control, Titles and Registration, IRP, RFP development, vendor selection, negotiation, and contract compliance from the customer and vendor perspective.

Ms. Wiley has managed projects ranging from the design and development of major training curriculums to IT projects in a variety of subject areas, including Motor Vehicle and License Plate Manufacturing.

As the Bureau Chief of Central Office Operations and Manager of the Vehicle Administrative Support Team, Ms. Wiley was responsible for operating and developing business rules for the Motor Vehicle Information Services (MVIS) system. Her vast driver and vehicle licensing business knowledge has been an excellent asset for multiple installations.

In 2018, she directed a team to redesign the manufacturing and issuance of license plates in Kansas. The team consisted of business and IT staff and multiple vendors and involved multiple software systems.

Mr. Wiley possesses excellent skills, including:

- Driving and facilitating the right discussions with business leaders to identify business capabilities in relation to current and future business objectives
- Ability to lead, build, manage, and enhance business capability model along a maturity/optimization framework to drive enablement of the longer-term roadmap
- Working closely with solution/technical architects to deliver business architecture artifacts needed for End-to-End Architecture and Solution Architecture deliverables

Mr. Wiley has successfully implemented the Celtic COTS product suites for Motor Vehicle and Motor Carrier Solutions in the following Jurisdictions:

- Missouri Department of Transportation
- Florida State Department of Highway Safety (Motor Vehicle Division)

- Insurance Corporation of British Columbia (under construction)
- Manitoba Public Insurance (under construction)

Project Reference:

Project Name	Commercial Motor Carrier Registration Solution	
Customer Name	Insurance Corporation of British Columbia (ICBC)	
Contact Information	Charito Mackay +1 778.866.4732 charito.mackay@icbc.com	
Role and Key Responsibilities		
SME / Senior Business Analyst		
 Review requirements defined by the Business Area and identify impacts and interdependencies before Planning occurs. Document the functional requirements and communicate them to the Team. Works with the ICBC Functional SME to elicit, analyze, and elaborate requirements. Decomposes high-level requirements into sub-requirements defining both functional and non-functional requirements. Provides additional information about requirements, Acceptance Criteria, and other details that are required to estimate and implement the high-level requirements Supports high-level estimation for Requirements. Leads functional team sessions Analyzes and triages defects created by testers. 		
Project Period	Jan 2022 – December 2022, with ongoing support and maintenance	
Project Description: The overall functions of the proposed COTS IRP solution include:		

a) Administer, calculate, and disperse British Columbia's registration fees and taxes for motor carriers traveling to other IRP jurisdictions.

- b) Maintaining and validating prorate information.
- c) User access support.
- d) Document management, monitoring, and reporting.
- e) Regular text file uploads of fee details to the IRP Clearinghouse.
- f) Reporting capabilities.

The IRP solution implementation must meet ICBC's end-to-end requirements in a strict timeline to comply with the new Data Repository for IRP, Inc., effective Jan 1, 2023.

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Bachelor of Science (Vocational Education)	Pittsburg State University	1980
39 hrs. Graduate Level Credit in Counseling	Pittsburg State University	1984
Certified Meeting Facilitator	Team Tech, Inc.	2000
Certified Public Manager	University of Kansas Public Management Center	2001

Name:	Nirav Shah	
Role Name:	Senior Technical System Architect	
Project Responsibilities Mr. Shah has spent 11 years designing, developing, and implementing systems for Motor Vehicle Administrations.		
 Mr. Shah is primarily responsible for the system application architecture, including: Being responsible for all solution architecture and technical design artifacts, translating the functional requirements into the technical architecture of the solution. Assessing the architectural impact on implementing proposed requirements. Participating in meetings and presenting potential changes needed to application architecture along with recommendations for implementation. Working with the functional and technical leads to identify and resolve both intra-phase and inter-phase integration issues 		
Mr. Shah oversees the technical enhancements of the Celtic COTS product line for twenty- two (22) jurisdictions.		
Project Reference:		
Project Name	Division of Motor Vehicles - Motor Carrier Solution	

Project Name	Division of Motor Vehicles - Motor Carrier Solution	
Customer Name	Alabama Department of Revenue (ALDOR) (Motor Vehicle Division)	
Contact Information	Trishawn Bell (Business Analyst) 334-242-9621 <u>trishawn.bell@revenue.alabama.gov</u>	

Role and Key Responsibilities

System Architect

- Responsible for the Design, build, and implementation of a work product.
- Participates in activities such as requirements elicitation, validation of architecture, and review of design

•	Creates detailed design artifacts, performs code reviews, implements validation, and
	supports activities in line with architecture requirements

• Works with the functional and technical leads to identify and resolve both intra-phase and inter-phase integration issues

Project Period	June 2020 - February 2022, with ongoing support and
	maintenance

Project Description:

Celtic was awarded the Alabama Department of Revenue, Division of Motor Vehicles, CMCS Project that included an integrated solution for IRP, IFTA, IRP/IFTA Audit, Trip Permits, CVIEW, Document Management System, and Learning Management System.

The system was implemented per the project plan and delivered within the allocated budget.

In 2017, Celtic implemented a new version of the system consisting of a modernized UI/UX with major application upgrades to support its infrastructure upgrades.

Celtic continues to support and maintain the integrated COTS solution for Alabama.

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Diploma in Mechanical Engineering	M.S. University of Baroda, India	1999
Advance Diploma in Computer Applications	DOEACC Society, India	2001
Master of computer application (MCA)	DOEACC Society, India	2004

Other experience or background information:

•	Platforms/Environment	Linux, z-Linux, Solaris, Amazon Cloud, Windows Servers, MS-DOS, and Azure Cloud computing
•	Programming Tools & Languages	JAVA, J2EE, C, C++, C#, SQL

•	Workflow & Rule Engine	Red Hat Drools, FICO Blaze Advisor, SoftwareAG My webMethods workflow engines, Read Hat JBPM
•	Middleware	EJB 2.1/3.0/3.1, Hibernate, Spring, IMS Connect
•	Web Servers	IIS, Apache, IBM HTTP server
•	DBMS & Data Modeling	MS SQL, DB2, Oracle, MS Access, My SQL, PostgreSQL, and ER-Win
•	Reporting Tools	Crystal Reports, Tableau
•	Other Tools	MS Project, MS SharePoint, MS Visio, MS Office tools, Jira, and Azure DevOps

Name:	Tom Stack
Role Name:	Senior Database Analyst
 Project Responsibilities With over 12 yes duties include creating application database conversion processes using Pervasive To infrastructure construction, and network responsibilities: Led the conversion requirements responsibilities: Led the conversion requirements responsibilities. Mork closely with clients and internare quirements. Analyze client data and identify/add process. Write scripts to convert potentially of Create source-target mapping, transported to the following are Mr. Stack's most recernare 2022 – Manitoba Public Insurance 2021 – Ontario, Ministry of Transport Florida Department of Highway Safe 2015-2017 – West Virginia dmvFirst 	ears of experience as a data architect, Mr. Stack's bases, updating data models, and creating and testing bols. Mr. Stack assisted with hosting facility setups, k stabilization, along with the following view and definition for multiple modules. al teams to understand and define data conversion dress problems that may impact the conversion complex client data for loading staging databases. sformation, and load design. ht projects: rtation, Missouri Department of Transportation, and ety and Motor Vehicles and Kansas Department of Revenue.

Project Reference:

Project Name	dmvFIRST – Cash Drawer and Inventory System
Customer Name	West Virginia Department of Motor Vehicles
Contact Information	Linda Ellis, Project Manager (currently Deputy Commissioner) 304.926.0716 linda.k.ellis@wv.gov

Role and Key Responsibilities					
Database Architect					
 Responsible for all data des governance model 	ign artifacts, database architecture, data migration, and data				
 Collaborate with DMV Data developers. 	base Administrators (DBAs) to address database changes from				
Manage database configura	ations for all environments.				
 Document and maintain da the development team in re 	tabase standards and guidelines on the project and support esolving any database issues.				
Responsible for data manage	gement implementation, data exchange implementation, and				
Data migration.					
Project Period	June 2016 – October 2017, with ongoing support and maintenance				
Project Description:					
Celtic implemented its CMVS so	lution for the West Virginia project named "dmvFIRST" to				
replace Driver's Licensing and T	itle and Registration services at the counter and back-office				
transaction processing that meet customer needs. As customers request services at the					
counter, dmvFIRST will access the	ne customer account for detailed customer information and,				
depending on the type of transa	action (T&R new Registration, renewal, etc. and/or D/L				
managed may at a last state	a feed for convince, provides for the collection of these feed				

counter, dmvFIRST will access the customer account for detailed customer information and, depending on the type of transaction (T&R new Registration, renewal, etc. and/or D/L renewal, new, etc.) calculates the fees for services, provides for the collection of those fees and issues the appropriate inventory for Headquarters and 24 field office statewide. **The volume of yearly transactions completed:** 2.2 million **Work accomplished:** West Virginia had an antiquated system for processing customer-facing transactions dating back over 30 years. Celtic implemented their CMVS solution to replace services at the counter and back room that meet customer needs.

The project consisted of the functionality for Driver's License, Title and Registration, Dealer Licensing, Dealer License Application, Inventory, Finance, Hearings, and Convictions As customers request services at the counter, dmvFIRST calculates the fees for services, provides for the collection of those fees, and issues the appropriate inventory throughout the State for Headquarters and 28 field offices statewide.

Degree, certification, other distinctions	Institution	Date
Bachelor of Science (BS CIS)	University of Phoenix, AZ	2008
Oracle Database Administrator	Oracle	2010
Linux Operating System Administrator	Red Hat	2010
Linux Internet/Intranet Server Administrator	Red Hat	2011

Education, certifications, and other distinctions:

Other experience or background information:

•	Platforms/Environment	Linux, Amazon Cloud, Windows Servers, MS-DOS, and Azure Cloud computing			
•	Tools & Languages	CICS/TX SERIES, DB2/UDB, ORACLE, COBOL, SQL, and Pervasive Data Integrator			
•	Other Tools	MS Project, MS SharePoint, MS Visio, MS Office tools, Jira, and Azure DevOps			

Name:	Rajib Chatterjee			
Role Name:	Testing Coordinator			
Project Responsibilities: Mr. Chatterjee has 12 years of experience in projects for the Motor Vehicle Services (MVS) product lines, including Drivers Licensing, Vehicle Registration, Permitting and Automated Routing, IRP, IFTA, CVIEW, and Fuel & for sixteen (16) Jurisdictions in the United States and two (2) provinces in Canada.				
 The key responsibilities of Mr. Chatterjee are as follows: Define the overall testing strategy and be involved in the planning, monitoring, and controlling of the testing activities and tasks. Manage execution of regression, integration, and performance test cycles. Maintain and manage Regression and Performance test suite. Escalate issues identified with regression and performance test cycle. Coordinate regression testing of business functions with each software release. Develop test plans, prepare test cases, and reviews test case results. Also, prepares the schedule for project ovecution 				
 Following are Mr. Chatterjee's most recent projects: 2022 –Insurance Corporation of British Columbia 2021 – Ontario, Ministry of Transportation, Missouri Department of Transportation, and Florida Department of Highway Safety and Motor Vehicles 2015-2017 – West Virginia dmvFirst and Kansas Department of Revenue. 				
Project Reference:				

Project Name	Credentialing System	
Customer Name	Missouri Department of Transportation (MoDOT)	
Contact Information	Nathan Fontaine (Project Manager) 573.522.1353 Nathan.Fontaine@modot.mo.gov	

Role and Key Responsibilities	
<u>QA Lead</u>	
• Involved in Requirement Gath	nering and Requirement Specification Documents preparation.
Defined and documented Tes requirements after analyzing	t Plan, Defect Management Strategy, Test cases, and Test Data relevant Functional Requirements Specifications.
 Communicated business required for managing 	irements, goals, and directives to the technical team and served as a user expectations and client satisfaction.
Measured and monitored act	ual test results.
 Managing and coordinating te Matrix (RTM), ensuring comp 	esting activities with the QA team. Handled Requirement Traceability lete test coverage.
 Provided timely support to th those using Jira Service Desk to 	e UAT team before going 'Go-Live'. Logged defects and tracked till its closure.
Project Period	June 2020 - February 2022, with ongoing support and maintenance
Project Description: A turn-key Motor Carrier Crede	ntialing Solution for the Missouri Department of
Transportation (MoDOT). This	includes all necessary design, development, implementation,

customization, configuration, installation, training, and ongoing maintenance and support to address the business and technical needs, including the following components:

- a) A comprehensive, integrated system for: 1) the processing and administration of commercial vehicle apportioned registration under the International Registration Plan (IRP); 2) fuel use tax licensing and reporting functionality for motor carriers under the International Fuel Tax Agreement (IFTA); 3) Operating Authority (OPA) to include House movers licensing within the module and 4) IRP/IFTA related audit functions, hereinafter referred to as the Motor Carrier Credentialing Solution.
- b) An interface to the federal government's comprehensive Commercial Vehicle Information Exchange Window (CVIEW) system for the exchange of data within the state related to commercial vehicle credentialing and tax systems. This information includes portions of the interstate carrier vehicle and driver snapshots and other reports for exchange within the state, including to roadside sites. The CVIEW system

also exchanges data with the Safety and Fitness Electronic Records System (SAFER), that is compliant with the Federal Motor Carrier Safety Administration (FMCSA) Commercial Vehicle Information Systems and Networks (CVISN) program.

c) Azure Government Cloud Hosted Solution.

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Bachelor of Science	Burdwan University, India	2003
Software Testing (ICPT) + QTP Advance	Innate Labs, India	2010

Name:	Sherri Black
Role Name:	Training Co-Ordinator
Project Responsibilities: Ms. Bl Black has worked on various mo	ack has work experience in DMV Space for over 20 years. Ms. odernization initiatives for Washington State.
 Ms. Black possesses excellent contributes to conceptualizin Proactively looks for existing of Involved in training material continuity Lead Full range of support function continuity management Plan releases in line with required 	ommunication skills: g innovative solutions based on anticipated needs client issues and provides ideas to resolve them creation and training curriculum development in coordination with as, including but not limited to service level, training, and business uirements resulting from approved changes.
 Ms. Black has provided training Carrier Solutions in the followin Connecticut Department of Trans D.C. Department of Motor Ve Missouri Department of Trans 	for our COTS products suites for Motor Vehicle and Motor ag Jurisdictions: ransportation hicles

Project Reference:

Project Name	Motor Vehicle Registration Solution	
Customer Name	D.C. Department of Motor Vehicles	
Contact Information	Elaine Speller (Program Manager) 202.729.7078 Elaine.Speller@dc.gov	

Role and Key Responsibilities

Business Analyst

• Provide system analysis, design, and specification documentation to the development team for the implementation of a new system feature or new client installation

6721 Z1 Appendix B (Option 1) MMCIS Modernization

•	Perform system quality assurance testing for all COTS Products, including system procedures and
	sign-off documents
•	Level 1 customer support to solve system issues, open incident tickets or determine the next

- Level 1 customer support to solve system issues, open incident tickets or determine the next steps in the escalation process
- Develop and maintain the system user guide and training material
- Provide ongoing training for enhanced and new functions

Project Period	April	2018 -	October	2019,	with	ongoing	support	and
	main	tenance						

Project Description:

Celtic implemented a web-based, mobile-ready, Azure Government Cloud Hosted solution for Commercial Vehicle Registration that complies with all IRP and PRISM/MCMIS requirements.

Integration/interconnectivity with the District's Motor Vehicle Registration System (DESTINY) and is operationally and architecturally compatible with:

- The National Motor Vehicle Titling Information System (NMVTIS)
- District's financial system and payment services

Education, certifications, and other distinctions:

Degree, certification, or other distinctions	Institution	Date
Bachelor of business management	Western Governors University	2023
Associate in Science	Centralia Community College	1998

i. Summary of Bidder's Proposed Personnel Management Approach

11. i) Description of policies and plans to retain key project personnel

The bidder shall describe policies, plans, and intentions with regard to maintaining continuity of personnel management throughout performance of the contract resulting from the Request for Proposal.

ii) Plan to avoid and minimize personnel changes Bidder shall provide the plan to avoid and minimize the impact of personnel changes.

iii) Commitment to use planned personnel

The bidder shall commit to using the personnel identified in the proposal and agree the NE DMV must approve proposed changes during the term of the contract.

iv) Agree not to reassign personnel

The bidder shall agree the bidder's proposed project personnel may not be reassigned, replaced, or added during the project without the prior written consent of the NE DMV Project Administrator. The bidder shall agree the bidder's proposed key project personnel may not be assigned new or additional contract assignments outside the State of Nebraska contract, without the prior written consent of the NE DMV Project Administrator.

v) Bidder agrees that state reserves right to change bidder project personnel

The bidder shall agree the NE DMV reserves the right to require a change by the bidder in the project personnel at the Project Administrator's discretion.

vi) Planned backup personnel

The bidder shall identify planned backup personnel assignments.

vii) Provision of license numbers for professional certifications

The bidder shall provide license or other identifying numbers for professional certification (Such as Project Management Professionals).

Bidder response:

Since our inception in 2003, Celtic was able to retain our core team by practicing the following rules:

- Giving employees the responsibility and authority to get things done
- Treating employees with respect and trust
- Providing feedback on performance and recognizing achievement (promotions, performance bonuses, and celebrations)
- Dedicating thought and resources to promoting high morale
- Periodic training and role swapping
- Hiring the right people

Celtic will utilize the personnel designated to work on the NE DMV MMCIS project dedicatedly until its completion.

Celtic has an established change management plan to accommodate changes in personnel or resources to gain backing for the project and necessary resources if the need arises in accordance and with the prior approval of NE DMV. We will reinforce the workforce or resources required for the project to spearhead the change and educate the team on the changes while providing support for their concerns. We will plan to identify the required resources upfront to avoid impediments or delay during the execution phase.

Celtic will plan for and execute the changes to personnel determined for the project in accordance with NE DMV and with their prior approval. Celtic will inform NE DMV of the identified backup personnel early on when the need arises. We shall provide the license numbers for professional certifications for each individual designated to work on the NE DMV MMCIS project to NE DMV.

i. Summary of Bidder's Proposed Personnel Management Approach

12. Bidder agrees that the State reserves right to review criminal background check

The bidder shall agree the NE DMV reserves the right to review criminal background checks conducted on project personnel to uphold the integrity of the project.

Bidder response:

Celtic understands the importance of a proper background verification process to ensure that the right people are onboarded. We have a proper mechanism in place to conduct the background checks of the candidates. We concur that NE DMV has the right to review criminal background checks. We will provide the relevant information and documents relating to the candidates to NE DMV when required for background verification.

i. Summary of Bidder's Proposed Personnel Management Approach

13. Describe security measures to determine suitability to access sensitive personal information:

Describe security measures bidder takes to determine employee or subcontractor employee suitability for accessing personal or sensitive personal information. Include a description of background checks completed prior to employment and detail the process for conducting background or pre-employment screening checks for employees and subcontractors.

Bidder response:

Celtic understands and will comply to ensure that no sensitive personal information is breached. We shall follow various security measures which include:

- Conducting a background check for every individual. This will help uncover any previous criminal activity or other red flags that may make them unsuitable to access sensitive information.
- Checking references, i.e., asking for references from previous employers or other individuals who know the individual well, will provide a better idea of their character and whether or not they can be trusted with sensitive information.
- We use a secure server to store the information and only authorized users are allowed the confidential information.
- We keep a record of users accessing sensitive information to consistently prevent or identify any potential security breaches.

r. Subcontractors

14. If the bidder intends to Subcontract any part of its performance hereunder, the bidder should provide:

i. name, address, and telephone number of the Subcontractor(s);

ii. specific tasks for each Subcontractor(s);

iii. percentage of performance hours intended for each Subcontract; and

iv. total percentage of Subcontractor(s) performance hours.

Bidder response:

Celtic has two office locations,

- Celtic Cross Holdings Inc. (Celtic Systems or Celtic) is located in Scottsdale, Arizona, USA and
- Celtic Systems Pvt. Ltd. (Celtic) is located in Gujarat, India

Both offices are under the same ownership. The development work of the solution for the State of Nebraska will occur in the United States.

Celtic has no plans to include any subcontractors in the execution of this project.

2. Technical Approach a. Understanding of the Project Requirements

15. Describe your proposed solution for IFTA services in the modernized NE DMV Modernized Motor Carrier Information System (MMCIS), including but not limited to: Single Customer, credential administration, tax return processing, tax and interest rate administration, noncompliance (non-filers and balances dues) and renewal processing.

Bidder response:

The Celtic CTS-IFTA is a complete browser-based solution for International Fuel Tax Agreement (IFTA) registration, credentialing, tax reporting, and auditing.

Our product gathers carrier and fuel-specific information including miles traveled, gallons used, and taxes paid, and keeps a history of all changes to the information. It provides NE DMV MMCIS users the ability to enter their renewals, decal requests, and quarterly tax returns or file paper reports for data entry into the system. Current tax rates are applied each quarter to verify returns are accurate, and funds are netted among jurisdictions through the IFTA Clearinghouse. Our Audit feature provides for 12-quarter audits with rolling interest and penalties.

Below is a sample screenshot of the flow of the CTS-IFTA System:



Below is a sample screenshot of the CTS-IFTA COTS IFTA System:



2. Technical Approach

a. Understanding of the Project Requirements

16. Describe your proposed solution for IRP services in the modernized NE DMV MMCIS, including but not limited to: Single Customer, new accounts, vehicle registration process (including bulk vehicle processing) credential and inventory administration, fee and tax rate administration, and renewal processing.

Bidder response:

The Celtic CTS-IRP is a comprehensive browser-based COTS solution for managing IRP registration, credentialing (IRP Cab Cards, Plates, and Validation stickers) and apportionment of fees, giving NE DMV everything required for processing IRP and Audit business transactions, including new account creation, fleet management, weight group control, vehicle (including individual and multiple) & distance management, and audit supplements. Our integrated document management system allows inline scanning/uploading, and auto-indexing of required documents collected across the transaction flow. In addition, for renewals, the system handles updates from the previous year in a dual-year situation eliminating the need to reenter the vehicle data multiple times.

At the core of the IRP System is our Fee Calculator – a regularly updated tool providing accurate fee calculations based on current jurisdiction fee schedules and the Canadian exchange rate. CTS-IRP automates credit apportioning and generates a monthly IRP Clearinghouse file. Our solution gives the ability to add jurisdiction-specific administrative fees and provides a detailed breakdown of fees during invoice generation. In addition, our solution provides for base jurisdiction distribution of funds via general ledger codes. Our "Hand Calculation" module will display exactly how fees are calculated for each vehicle for each jurisdiction of travel. This tool eliminates the need to scan program logic in the event questions are raised by other jurisdictions regarding how fees are calculated.

CTS-IRP generates notices to carriers on a regular scheduled basis and the system identifies accounts for suspension/revocation.

The Celtic solution provides flexible, external interfacing capabilities to accommodate third-party payment systems, address validation, VIN validation services, and other NE DMV MMCIS systems.

CTS-IRP audit features allow authorized users to generate a letter of intent, enter audit results, generate an audit invoice, and collect
payment. These audits will be included in the monthly automated IRP Clearinghouse transmittal.

CTS-IRP provides a solution that integrates account access for internal and online users. There are two sections, Services, and Operations. The Services section is where the Enterprise and IRP options reside, and the operations section is where the user management, inventory, and financial options reside.

The Enterprise level functionality allows jurisdiction internal users to create new customers, update customers, create email templates and run ad hoc reports. The IRP system contains all of the functionality and features needed to process, inquire, or update account transactions, reprint invoices, and credentials.

The Operations level functionality allows for the management of inventories, which can be assigned or reassigned to any branch location. Finance includes cashier drawers, payments, refunds, and reports to support the distribution of funds. User management allows the authorized user to create, maintain or reset a password for new and existing users.

Below is a sample screenshot of the flow of the CTS-IRP System:



Below is a sample screenshot of the CTS-IRP COTS Enterprise System:

Site Map			
Services / Enterprise			
Customer	Audit	Jurisdiction	Email Management
Update Customer	Audit Selection	Jurisdiction Update	 Edit Email Template
Customer Inquiry	Audit Selection Work In Progress	Jurisdiction Inquiry	Sender/Recipient Management
Service Provider			
New Customer Merge			
More •			
Administrative	User	Information	Reports
Administrative Fee	User Profile	Prerequisites	AdHoc
Batch Process	Change Office Location	Version Info	Translog Inquiry
Batch Process Inquiry			User Activity
Create Announcement			
More •			
$\bigcirc (1)) \bigcirc \bigcirc$			
Prism	Client Support	Miscellaneous Fee	104
	cicic support	Mischarleousree	
Carrier Search	Screenshots	Miscellaneous Fee	
Census Search	Exception Viewer	Miscellaneous Fee Inquiry	
Vehicle Search	Application Log	Work In Progress	
	Conversion Assistance	NSF	

Below is a sample screenshot of CTS-IRP COTS IRP System (1 of 2):



Below is a sample screenshot of the CTS-IRP COTS IRP System (2 of 2):

Additional Inquiries Distance Reports Administrative Supplement Inquiry IRP Distance Inquiry Account List Report Account List Report Account List Report Batch Process Batch Process Batch Process Batch Billing Batch Billing Batch Credential More I Your Correction Inquiry Avdit Actourt List Process Audit Reporting Audit Reporting Audit Processing Payment Transaction Cancel Audit Letter Of Intent IRP Process Audit Fleet/Distance IRP Process Audit Fleet/Distance Payment Cancel Fleet Reinstatement Audit Letter Of Intent IRP Process Audit Fleet/Distance Next Day Cancellation	Additional Inquiries Distance Reports Administrative Supplement Inquiry IRP Distance Inquiry Account List Report Account List Report Account List By Fleet and Service Provider Batch Process Bat			_		
Supplement Inquiry IRP Distance Inquiry Account List Report Account List Report Account List Report Batch Process Batch Process Batch Billing Batch Process Batch Billing Batch Billing Batch Billing Batch Billing Batch Process Batch Billing Batch Process Batch Billing Batch Billing	Supplement Inquiry IRP Distance Inquiry Account List Report Account List Report Account List Report Batch Process Batch Process Batch Process Batch Billing Batch Billing Batch Billing Batch Credential More > Audit / Error Correction Inquiry Audit Reporting Audit Reporting Audit Inter of Intent Audit Inter of Intent Audit Inter of Intent Inter of Intent Inter of Intent Next Day Cancellation Cancel Fleet Reinstatement Audit Letter of Intent Audit Letter of Intent Inter of Intent Inter of Intent Next Day Cancellation	Additional Inquiries	Distance		Reports	Administrative
Transaction Cancel Audit Reporting Audit Processing Payment Cancel Fleet Reinstatement Audit Letter Of Intent IRP Process Audit Fleet/Distance Next Day Cancellation	Transaction Cancel Audit Reporting Audit Processing Payment Cancel Fleet Reinstatement Audit Letter Of Intent Audit Vehicle Listing IRP Process Audit Fleet/Distance Next Day Cancellation Instalment Raument	Supplement Inquiry Comment Inquiry Fee Schedule Inquiry Factory Price Inquiry Audit / Error Correction Inquiry	IRP Distance Inquiry Jurisdiction Fee Inquiry APVD Chart Inquiry		Account List Report Account List By Fleet and Service Provider Aging Report Equipment By USDOT Report More D	Batch Process Batch Process Inquiry Batch Billing Batch Credential More >
Transaction Cancel Audit Reporting Audit Processing Payment Cancel Fleet Reinstatement Audit Letter Of Intent IRP Process Audit Fleet/Distance Next Day Cancellation	Transaction Cancel Audit Reporting Audit Processing Payment Cancel Fleet Reinstatement Audit Letter Of Intent Audit Vehicle Listing IRP Process Audit Fleet/Distance Next Day Cancellation Instalment Raument					
Cancel Fleet Reinstatement Audit Letter Of Intent IRP Process Audit Fleet/Distance Next Day Cancellation	Cancel Fleet Reinstatement Audit Letter Of Intent Audit Letter of Intent Audit Vehicle Listing Interacting Audit Fleet/Distance Installment Reamont	Transaction Cancel	Audit Reporting		Audit Processing	Payment
Audit Vehicle Listing Intrastate Audit Installment Payment Audit Carrier Report Cancel Installment Distance Analysis Report (IFTA vs IRP) More >	Audit Cerrier Report Distance Analysis Report (IFTA vs IRP) More	Cancel Fleet Reinstatement	Audit Letter Of Intent Audit Vehicle Listing Audit Carrier Report Distance Analysis Report (IFTA vs IRP) More >		IRP Process Audit Fleet/Distance Intrastate Audit	Next Day Cancellation Installment Payment Cancel Installment

Below is a sample screenshot of the CTS-IRP COTS Finance System:

Site Map Operations / Finance				
Office	Cash Drawer	Reconciliation		Deposit
Manage Office Update Office	Open Cash Drawer Close Cash Drawer Cash Drawer Inquiry Adjust Cash Drawer	Office Reconciliation Adjust Reconciliation Reconciliation Inquiry	$\left(\begin{array}{c} \\ \\ \end{array} \right)$	Office Deposit Adjust Deposit
Payment	Refund	Reprint	$\overline{\bigcirc}$	System Credit
Cart Payment Post Payment Same Day Payment Cancellation Payment Inquiry	Refund Approval Refund Inquiry Refund Report	Payment Receipt Deposit Statement Combine IFTA / IRP Invoice		System Credit Deposit IRP Payment Plan Cash Bond Deposit System Credit Inquiry System Credit To Refund
Bond)) Reports	BU	B	B
New Bond Update Bond Bond Inquiry Bond Report	Transaction Inquiry Deposit Financial Summary Ledger Credit Processing More •	120	20)

Below is a sample screenshot of the CTS-IRP COTS User Management System:

Site Map			
Operations / User Management			
User	Role	Location	Reports
Create User Update User User Insurance	Create Role Edit Role	Add Location Update Location	Roles Functions Report Users Report

a. Understanding of the Project Requirements

17. Describe your proposed solution for a Nebraska state, county, city, sales tax and tire fee process in the modernized NE DMV MMCIS, including but not limited to: tax and tire fee assessment and collection, daily interest calculation and management, tax rate administration, and reporting.

Bidder response:

At the core of the IRP System is our Fee Calculator – a regularly updated tool providing accurate fee calculations based on current jurisdiction fee schedules and the Canadian exchange rate. CMCS automates credit apportioning and generates a monthly IRP and IFTA Clearinghouse file. Our solution gives the ability to add jurisdiction-specific administrative fees and provides a detailed breakdown of fees during invoice generation. In addition, our solution provides for base jurisdiction distribution of funds via general ledger codes. Our "Hand Calculation" module shows exactly how fees are calculated for each vehicle for each jurisdiction of travel. This tool eliminates the need to scan program logic in the event questions are raised by other jurisdictions regarding how fees are calculated.

a. Understanding of the Project Requirements

18. Describe your proposed solution for an accounting and payment processing solution in the modernized NE DMV MMCIS, including but not limited to: in office cash management for a Single Customer model, reporting and distribution (including IRP Data Repository, IFTA Clearinghouse and state defined).

Bidder response:

Celtic's COTS Enterprise application comes with a comprehensive Finance module comprising various accounting and payment processing functionalities such as Office Management, Cash Drawer Management, Cash Drawer Reconciliation, Office Deposits, Refunds, and a wide range of financial reports.

The shopping cart functionality helps the user to add multiple transactions to it and process payment for transactions individually or in bulk. This significantly reduces the number of steps they need to take, as opposed to having to process payments for every single transaction one at a time.

The Finance module is capable of supporting IRP and IFTA Clearinghouse processing to NE DMV MMCIS through the Clearinghouse Netting process. Our solution gives the ability to add jurisdiction-specific administrative fees and provides a detailed breakdown of fees during invoice generation. In addition, our solution provides for base jurisdiction distribution of funds via general ledger codes.

The CMCS system business rules are configurable to calculate late filing and late payment penalties and interest, and process refunds based on NE DMV's requirements. Our system generates notices to carriers on a regularly scheduled basis and the system identifies accounts for suspension/revocation.

The reporting and inquiry functionalities include all transactions related to credentials and payments. Reports include fee distribution, payment information, payment ledger, fee ledger, financial summary, and more.

a. Understanding of the Project Requirements

19. Describe your proposed solution for the management of IFTA and IRP audits.

Bidder response:

Celtic's CMCS system has built-in tools for selecting, notifying, and conducting both current and previous year IRP and IFTA audits. Our audit selection module produces a prioritized list of carriers who meet criteria specified by the auditor (e.g., rounded miles, year-to-year mileage duplication, and other auditor-desired criteria). Audit results can then be entered into the COTS audit module, and these audits will be included in the monthly automated IRP and IFTA Clearinghouse transmittal.

a. Understanding of the Project Requirements

20. Describe your proposed solution to maintain and enhance NE DMV's full compliance with ITD (innovative technology deployment) and PRISM requirements.

Bidder response:

The Celtic CMCS system is a web-based, roles-based, totally integrated solution that provides out of the box interface and compliance with 12 ITD and PRISM requirements for IRP registration.

The proposed COTS solution is already deployed in multiple jurisdictions in the US and Canada and the product is already compliant with industry-standard performance parameters. However, we will be doing Performance testing of the customized product to verify that the COTS solution is meeting the performance standards according to NE DMV requirements to maintain and enhance NE DMV's full compliance with ITD and PRISM requirements.

a. Understanding of the Project Requirements

21. Describe your proposed solution for the administration and management of delinquent motor carrier activity in the modernized NE DMV MMCIS, including but not limited to: delinquency tracking, system generated correspondence and documents, and reporting.

Bidder response:

IRP System for the Administration and Management of Delinquent Motor Carrier Activity

The CMCS IRP solution provides a suspension batch job that notifies respective carriers about their pending payments by generating required report and changing the status of their account or fleet to Suspended.

The batch job for audit and non-audit transactions comprises of the following two options:

- 1. Generate Past Due Notice: This batch job generates a warning letter for carriers that have not paid their invoices. The warning letter indicates the duration allowed to pay the pending invoice and if they fail to do so, their account is marked as Suspended.
- 2. Suspension: This batch job flags the carrier that have not paid the pending invoices and the grace duration allowed to pay the invoices as stated in the warning letter sent to the carriers has expired.

IFTA System for the Administration and Management of Delinquent Motor Carrier Activity

The CMCS IFTA solution provides batch jobs including "Non-Filer Suspension", "Non-Payer Suspension" and "Audit Suspension" that allows tracking the delinquency and generating the correspondences/notices for late filers and balance due carries.

The IFTA Non-Filer Suspension batch job includes the following two options:

- 1. Non-Filer Suspension Warning Letter: This process generates the correspondence for carriers that have failed to file their tax returns and have their licence status marked as Delinquent.
- 2. Non-Filer Suspension Process: This process generates the suspension letter for carriers that have not filed their tax returns after sending the suspension warning letter and have their licence status marked as Suspended.

The IFTA Non-Payer Suspension batch job includes the following two options:

1. Non-Payer First Assessment Letter: This process generates the correspondence for carriers that have not paid their tax returns in full and have their licence status marked as Delinquent.

2. Non-Payer Suspension Process: This process generates the suspension letter for carriers that have not paid their tax returns in full after sending the assessment warning letter and have their licence status marked as Suspended.

The IFTA Audit Suspension batch job includes the following two options:

- 1. Audit First Assessment Letter: This process generates the letter for carriers that have not paid their audit return in full and have their licence status marked as Delinquent.
- 2. Audit Suspension Process: This process generates the suspension letter for carriers that have not paid their audit return in full after sending the assessment warning letter and have their licence status marked as Suspended.

The CMCS IFTA solution accurately assesses the interest and penalty for late filers and balance due carriers.

a. Understanding of the Project Requirements

22. Describe your proposed solution for a public facing trip and fuel permit issuance system.

Bidder response:

Celtic Permit solution contains a Self-Issuance Permit module with out-of-the-box functionality to issue public-facing trip and fuel permits. Our solution eliminates the efforts of registering or signing on into the system for the issuance of permits. In addition, the system provides functions for the management, tracking, and reporting of permit information.

The Self-Issuance module supports the issuance of various permit types including but not limited to:

- Fuel Permit & Combination Vehicles Permit
- Combination Vehicle Permit
- Dealer Laden Permit
- Fuel Permit
- Fuel Permit & Single Vehicle Permit
- Single Vehicle Permit
- Transporter Permit
- Unladen Permit
- Weight Increase Permit
- Weight Increase Permit
- Wrecker Permit

The Self-Issuance module captures information including the type of permit, duration, number of permits, origin and destination, vehicle to be used for travel, and additional applicable specifications on a single screen. The fees are configured based on the State business rules. The system issues permit based on the customer delivery format preference such as PDF, email, etc., after the completion of the payment. The fields pertinent to the types of permits will be configured/customized to meet the requirements of the NE DMV MMCIS solution.

Permit Details				Trip Permit
~[]]]	\bigtriangledown			
Customer Details				
Account No.:	Legal Name :		DBA Name :	
\sim	~ 100		$ \geq 1 \cup 1 $	
Address Details				
Physical Address Mailing Address				
Street: ***	Zip Code :	83703	Jur:	ID - IDAHO 🗸
City: BOISE	County:	ADA	Country:	US
		\sim		
Business Customer Details				
TIN:	USDOT No.:			
Primary Contact Name :	Email:		Primary Phone :	
	$\frown ()) \stackrel{_{\sim}}{_{\sim}}$		\sim	
Permit Details				
*Permit Type : FTP - FUEL PERMIT	✓ Transaction Type:	NPMT - NEW PERMIT	Permit No. :	
Duration: H - 72 hours 🗸	No. Of Permits :	1 - 72 hours 🗸	Permit Status :	A - Active 🗸
*Effective Date : 11/21/2022 10:42:43	PM Expiration Date:	11/24/2022 10:42:43 PM	Exempt:	F - Fuel 🗸
*Origin :	*Destination:		Commodity :	
Handwritten?:	Handwritten Permit No.:		Citation :	
Amount Overweight :	Overweight Type :	*	Driver Name :	
EPA No. :	Manifest No.:		Weight Increased To :	~
Vendor:				

Below is a sample screenshot of Celtic's Self-Issuance Permit module:

			\sim		\sim	
Fees Details						
	Fee Type		Fee Amt(\$)	[Waive]		
	FUEL PERMIT			36.00		
	Total			36.00		
		N N K			$\setminus V \leq$	
New Vehicle S	Search Criteria					
	VIN :		Plate No. :		Find Refresh Vehicle	
		Enter either the VIN or Plate	No. and select Find.			
	())		(())		\frown (()) \checkmark	
Vehicle Detail	ils					
	VIN :		*Unit No.:		*Plate No.:	
	*Body Type:	~	*Make: 🗸 🗸]	*Model Year:	
	GVW: 🗸					
		$\setminus \setminus \downarrow$	$\setminus \setminus \langle \zeta \rangle$		N V K	
Delivery Type						
	Electronic Delivery Type : D - PDF	~				
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-4111-		-5111-	
Comments	0					
			Proceed Refresh Quit ?			

### a. Understanding of the Project Requirements

23. Describe your proposed solution for document storage and management in the modernized NE DMV MMCIS. The proposed solution should include but is not limited to: customer document uploading, scanning, storage and retrieval, and automatic system generated document storage.

#### Bidder response:

Celtic's integrated Document Management system (CTS-Doc) allows inline scanning/uploading, storing, and auto-indexing of required documents collected across the transaction flow. In addition, our system provides queue management for subsequent batch scanning to allow mass document collection.

Automatic indexing – a sophisticated numbering process that occurs during document scanning, which allows for rapid retrieval of documents based on specific search criteria (i.e., Customer, Account #, Fleet #, Supplement #, etc.). <u>Notes / Comments</u> – Document search and retrieval are subject to role-based access. Only users with specific roles can search and retrieve documents for viewing within the applications (for example, IRP) to which they have access.

**Document Numbering** - The system automatically assigns a unique ID to each document and creates a link of attached scanned documents to the IRP Account, IRP Fleet, and Supplement's relevant section (i.e., documents can be linked with IRP Account, IRP Fleet, Vehicles, and Invoice).

**Retrieval** - Attached documents can be opened by clicking on the document link using the Inquiry functionality.

Below is a flow diagram of Celtic's document management system interfacing with the IRP system:



### b. Proposed Solution, Development Approach and Architecture

24. Describe how the offered solution has been deployed in an environment like the technical environment of the State DMV/OCIO. Please specify use of software platform, use of VMware, network bandwidth, etc.

#### Bidder Response:

We expect that the State will provide the recommended software at least one month prior to the deployment of the first sandbox release as per the project plan deliverables.

Description	Specification
Window Server 2019 and above	Operation System
(Backward compatibility till Windows Server 2014)	
IIS 8.x (Internet Information Server)	Application Server
.Net Framework 4.5	Application Framework
SQL Server 2019 and above	Database
(Backward compatibility till SQL Server 2014)	

Crystal Report Designer license for each application installed on a server	Report Generation
ID Automation	Barcode Generator
Workstations with	Workstations
Internet connection	
<ul> <li>Any of the browsers like IE 11, Edge, Google Chrome, Firefox, Safari browser</li> </ul>	
Adobe Acrobat Reader	

#### b. Proposed Solution, Development Approach and Architecture

25. The solution shall be a big bang approach. Describe the proposed deployment strategy, including but not limited to:

- 1. Detailed information on preparation before execution.
- 2. Detailed information on execution of approach.

#### **Bidder Response:**

### Working with the agency's IT and business groups throughout the program.

One of the first steps in the project will be to meet with the NE DMV project team to validate the requirements, perform a detailed "Fit Gap" analysis and drive out the detailed project plan with all sub-tasks and associated dates. We will derive an understanding of the exact meaning of each requirement, document them, and manage the requirements as the project evolves. A requirements traceability matrix (RTM) will be maintained to create bidirectional traceability among the requirements, project plan, and work products. The RTM will form the baseline for the project scope. Each requirement will be validated in each of the project steps, including Requirements, Design, Construction, Testing, and Implementation. In this way, we will be able to identify any inconsistencies between the project plan, work products, and requirements so that no requirement will fall through the cracks!

After the Requirements Traceability Matrix is finalized, we will work with NE DMV domain experts to go through the integrated COTS solution step by step and screen by screen to document the necessary modifications and configurations to meet the requirements. This document is called the Product Verification Document (PVD). The PVD will provide the design criteria needed for the development team to make the necessary changes to the programs that will result in the NE DMV International Fuel Tax Agreement (IFTA) and International Registration Plan (IRP).

During the RTM and PVD documentation processes, we will be configuring the infrastructure in the hosting environment as required by NE DMV hosted, or an Azure Government Cloud-based hosted environment, including the required hardware and system software, servers, firewalls, internet connectivity, backup/restore capability, disaster recovery capability all in a proposed load balanced and database mirroring set up for redundancy and maximum accessibility to the system. Part of this step is to work with the NE DMV IT experts to document all the required interfaces for access to other system data stores of information as required. During this step, we

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will create the Interface Control Document (ICD), which will define exactly how we will interface with the external systems.

To minimize the effect external interfaces have on the applications when these applications change, we have developed a Universal Interface Controller (UIC). Our UIC acts as an interpreter between external systems and our core CMCS application. When an external system file format changes resulting in a change to how that system interfaces with our applications, the only thing that needs to be changed is the UIC, not the application.

After the PVD is finalized and all changes to the COTS product are approved as documented in the PVD, and the hosting environment is ready, code changes and configuration changes are made in conjunction with unit testing, followed by integration testing, system testing, stress testing, User Acceptance Testing, Training, and cutover to production.

Show and Tell: Regular, incremental product releases for the extended team to get comfortable with what's coming.

An integral part of our approach is to deploy a "Sandbox" environment with the COTS application to provide an early user experience with respect to the "Look and Feel" of the solution. As the customization takes place, new deployments will be available, and users will be able to access the Sandbox to see the results of their efforts and feedback. This ensures there are no surprises at the time of implementation and is an excellent way to exercise the system early in the project, helping stabilize the programs and validate the converted data and feedback. We will help develop the skills and knowledge of the user community so they can perform their roles effectively and efficiently. We will manage risks by identifying potential problems before they occur so that risk-handling activities may be invoked as needed across the life of the project to mitigate adverse impacts on achieving project goals.

<u>Compliant</u>: Our products are running compliant processes in multiple jurisdictions; it comes Out of The Box!

The Celtic Solution is totally compliant with the IRP & IFTA plans, including Audit features IRP Clearinghouse Modernization, and is fully PRISM compliant. We will work with NE DMV to ensure our customized solution is compliant with NE DMV Administrative Rules and department business rules for motor carrier registrants.

<u>Proven Methodology</u>: Evolved over the years and matured with every installation, our methodology has IRP, IFTA, and Audit specific interventions and tweaks.

We have anticipated the complexities associated with undertaking this project and have already built a skeletal work plan with the

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associated tasks required to make a smooth transition to the new and exciting CMCS Solution for the NE DMV.

The Celtic Team will follow our proven Agile Methodology, combined with our internal processes and procedures, to complete this project on time and within the budget, as it has been done for 18 jurisdictions. Celtic's development methodology is designed to provide efficient and timely program development while ensuring the highest quality and accuracy.

Our development process has evolved, taking into consideration the best practices of Software Engineering, and combining them with the following standard industry business practices:

- Establish Detailed Project Plan Each project activity will be defined using the Microsoft Project tracking tool, and a top-level work breakdown structure (WBS) will provide the baseline for measuring project progress and will be used for project status reporting to show adherence with the schedule clearly.
- Establish Configuration Management for Project Products
- Create and document the Requirement Traceability Matrix (RTM)
- Create the Product Verification Document (PVD) Specifications
- Create and document the technical Interface Control Document (ICD)
- Define the Data Conversion Plan (with multiple trial conversions and data cleanup reports)
- Develop Testing Plans (System, Integration, and User Acceptance)
- Code and Unit Test with Prototype Presentations (using a "Sandbox")
- Perform Integration Testing
- Perform System Testing
- Perform Stress Testing
- Perform Regression Testing as required
- Develop User Manuals, Training Plans, and materials

- Develop detailed Cutover plans
- Deliver Train the Trainer for leads
- Assist with User Acceptance Testing
- Deliver User Training
- Perform Final Conversion run and verification
- Implementation into Production
- Post Implementation Review
- Operations, Maintenance Support, and Enhancements

One area we believe will be able to add value to our proposed project plan is the data conversion from existing database structures to a true "Common Client" database structure between IRP, IFTA, and IFTA Audit. One of the most important steps in converting any database of information is to get to know the data you are converting. Celtic will work closely with NE DMV to ensure the data is as free from inconsistencies as possible. We will run reports to identify inconsistencies in the existing data for NE DMV subject matter experts to review and resolve either by manual intervention or via some automated program correction. Our resources have converted IRP, IFTA, and IFTA Audit databases from State grown VSAM file structures and relational database stores to DB2, SQL Server and Oracle.

Once the Common Client database structures are in place, the new system will make for a much more efficient and effective database management platform.

Celtic resources have successfully converted IRP, IFTA, and IFTA Audit databases for multiple jurisdictions in the past.

### **Goals and Objectives**

Celtic's goals and objectives for the NE DMV System Modernization are to provide NE DMV with an integrated IRP, IFTA, and Audit solution that takes maximum advantage of new technologies to improve customer service and ensure compliance with business processing requirements.

Our COTS browser-based solution is designed by our experienced computer system technicians and architects together with Celtic solution business area experts and with input from real-world Motor Carrier Business Area Experts from multiple jurisdictions over a period of 16 years. Celtic will customize and configure our customer-centric and integrated solution for the State that will meet and exceed NE DMV expectations. Our solution utilizes the latest proven technologies and techniques to include lessons learned from our extensive experience over multiple implementations in the Motor Carrier Services Field. We will employ the most recent and proven platform-independent tools within the constraints of the State to accomplish the maximum benefit to the State.

### Why Celtic?

Celtic products have been installed and currently running in *18 jurisdictions in North America for over the past 16 years*.

Celtic has deployed Motor Carrier solutions over the past three years with key capabilities to eight (8) jurisdictions. In 2019 we implemented our solution in three jurisdictions: the Ohio Department of Transportation, the Idaho Department of Transportation, and Alberta Transportation (Canada). All were delivered on time and within budget!

Celtic resources have worked with Motor Carrier/Trucking organizations, and federal organizations, like the FMCSA and the IRP and AAMVA Organizations, for over 25 years. We understand registration, licensing, permitting, and tax return tracking and collection of returns. We understand the need for efficient transaction processing to afford the carriers more time on the job and less time in wait lines trying to get their authority to operate. Today's technology presents an unmatched opportunity to provide carriers with streamlined operations and processes that can minimize their operating costs.

Perhaps the single biggest testament to Celtic's capabilities in the Motor Carrier area comes from the selection of Celtic to provide the hosting and ongoing support and maintenance of the IRP Clearinghouse administered by IRP, Inc. The project was deployed in the year 2012 and went in seamlessly. As you know, the IRP Clearinghouse administers to all the US and Canadian jurisdictions and operates internationally. This gives us the confidence that Celtic has the experience and the technology to meet the NE DMV challenge for a new and efficient system.

The implementation and data migration timeline of 12 months for the MMCIS can be achieved only by using a CMCS COTS product. Our Proposed Implementation solution overview is given below:

- A. We will use our proven COTS solution CMCS (Celtic Motor Carrier System) which will provide most functionalities out of the box and require significantly less effort in configuration and customization when compared to a custom development effort.
- A. Our solution will drive operational efficiencies through workflows, configurable rules, and integration with other internal applications.
- B. Easier maintenance of the solution using a modular design approach.
- C. Reduced implementation effort leveraging our prior knowledge and experience in implementing motor carrier solutions in other USA and Canada jurisdictions.
- D. Agile development methodology to build the solution incrementally. The functionalities configured/customized will be available to NE DMV business users earlier to provide quicker feedback.
- E. Implement the solution in 12 months with a single deployment.
- F. The legacy system proposed to be de-commissioned in two months after Go-live.
- G. Use current NE DMV on-premises product licenses to reduce costs
- H. Warranty support of 365 days after Go-live

Given below is the implementation timeline with key milestones.



b. Proposed Solution, Development Approach and Architecture

- 26. Describe the Data Migration and Conversion approach, including but not limited to:
- a) Provide and give examples of experience with data cleansing, conversion, and migration.
- b) Describe proposed data cleansing, conversion and migration specifications and resources.

#### **Bidder Response:**

Celtic has performed data migration efforts for many clients, including some that have "homegrown" data in various formats, and converted it to our information database format. We will work with the state implementation manager to ensure the integrity and validity of the data. The below diagram depicts the various layers in the data migration development environment and the stages the data goes through prior to migration to the target system.



# Data Migration conceptual model

The following steps are performed as part of Data Migration Development. Celtic carries out steps five through six, whereas the State

executes steps one through four.

- Copy the data from the source into the landing zone raw layer DB
- Consolidate and cleanse the data into load ready staging area
- Perform data quality checks, reprocessing, fix data gaps per policies, and identify authoritative data
- Push to load ready staging in the agreed layout
- Celtic will follow the security policies of the State. Apply policies and data reconciliation
- Perform data conversion and load data from load-ready staging to MMCIS

### Activities performed and resources involved:

The overall scope of data migration (steps given above) includes extracting data from legacy systems and authoritative source identification, transforming and loading the data to the target system, agreed processes, and system definition. Multiple teams are involved in performing these activities.

The State is responsible for bringing the data from the respective source systems, cleansing the data, identifying authoritative data, and publishing the same to Celtic. Celtic will source this data, transform it to acceptable MMCIS standards, and load it to the MMCIS system.



# Data Migration flow

Both of these teams also will maintain a mapping document to provide traceability of data elements. The State will maintain a mapping document tracing the data lineage from the source systems to the load-ready staging. Celtic will maintain a mapping document that

traces data movement from load-ready staging to the MMCIS schemas.

The data migration team primarily consists of members from the following organizations.

### State:

- Data architect
- Systems architect
- Infrastructure and security SME

### Celtic:

- Solution architect
- Data architect/lead
- DBA

### Artifacts addressing data conversion, migration, and synchronization requirements:

Listed below are the artifacts which will be delivered in accordance with the State's requirements:

• Data migration and conversion plan and discovery phase deliverable.

This document will explain the conversion and migration approach, big bang vs. incremental, and detail the data conversion and migration plan, data mapping specifications, data loading standards, process reporting, job statistics standards, cut-over process, notification standards, unit test plan, release documents, data quality report and data reconciliation report

Document the cluster-wise approach where each cluster represents a domain, such as IRP, IFTA, Tax, Permit, DMS, etc., to MMCIS.

• Data model and data dictionary – discovery phase deliverable

CMCS OOTB data model and data dictionary will be shared with the State's team so that load-ready schema will be created based

on the same.

- Data synchronization approach discovery phase deliverable
- ETL detail-level design for job creation

This document will capture the ETL job design, which will extract the data from load-ready staging, perform the necessary transformations and load the MMCIS target tables.

This design also includes the audit and reconciliation job designs which helps to prepare the reconciliation reports and document the unit test plans for the ETL jobs.

• Data migration and conversion CMCS OOTB scripts

CMCS OOTB scripts which will be used for the post-conversion execution report.

• Data mapping specifications

Celtic will maintain a mapping document that traces data movement from load-ready staging to MMCIS schemas. The datamapping document may contain the following information: target schema name, target entity name, target element name, source schema name, source entity name, source element name, transformations applied (if any)

• Data migration and conversion test results

Celtic QA team will validate MMCIS with the migrated data to make sure the new system performs the functionality in accordance with the State's requirement after execution of the ETL jobs.

• Data Migration and Conversion progress reports

During data migration/conversion – the data not loaded due to an error is written back to the write-back table with the detailed error, which the State will investigate and fix at the source. This report helps the State to identify how many records are migrated to MMCIS and how many are in progress based on the migration criteria

- Release documentation
- The list of ETL Jobs, along with the schedule for execution, shall be provided.

### Approach for data conversion, data migration, data quality analysis and resolution, and data synchronization:

Our execution approach is contextualized, based on the best practices and past experiences of successful implementations of data migration framework, which is depicted below:

Tracks	Requirements Management	Migration Strategy and Architecture Definition	Data Mapping, Data Extract and Data Profiling	Design	Build and Test	Migration Execution
Technology Track Data Quality Assurance	<ul> <li>Acquire current state current information</li> <li>Understand migration imperatives</li> <li>Elicit requirements</li> <li>Business</li> <li>Technology</li> <li>Data</li> <li>Non functional</li> </ul>	<ul> <li>Define migration approach</li> <li>Define Foundation and Tranche execution approach</li> <li>Define migration architecture</li> <li>Define Data Quality mechanism</li> <li>Define Reconciliation and Exception Handling mechanism</li> </ul>	<ul> <li>Understand target data model and create upload format templates</li> <li>Data mapping from source to target</li> <li>Source data extract</li> <li>Data profiling and analysis</li> <li>Identify data issues that need cleansing applicable across Tranches</li> </ul>	<ul> <li>Create detailed design : data mapping and transformation rules</li> <li>Design audit &amp; reconciliation</li> <li>Incorporate Data Profiling and Analysis</li> <li>Design and plan tests</li> <li>Ensure scalability and reuse for next tranches</li> </ul>	<ul> <li>Build migration components using industry and <client> standards</client></li> <li>Unit testing and component integration testing</li> <li>Carry out Mock migrations to gain higher confidence</li> <li>Assure quality through exhaustive functional testing and UAT</li> </ul>	<ul> <li>Implementation planning, step by step implementation plan</li> <li>Carry out Dress rehearsals to simulate the migration scenario</li> <li>Migration execution</li> <li>Issue resolution and migration stabilization in the intensive care period</li> </ul>

# **Execution Approach**

- Determine the approach based on client business and functional requirements between the big bang and incremental load.
- Provide more focus on source data assessment and its quality
- GAP analysis and rectification of gaps.
- Re-assess the existing load –granularity, frequency, and archival requirements and maintain only the required thresholds during ETL phases

- Validate the history of incidents against the current loads. Identify the pattern and pro-actively fix them in all applicable/unnoticed areas
- Re-validate the current 'as-is' design, data model, data loads, and overall schedule and look for more optimized ways of implementation in 'to-be' migration.
- Decommission the unnecessary- data flows, data loads, and landing zones
- Handle the migration limitations through a workaround approach implementation using a combination of to-be technology
- Break the migration into multiple phases through the logical grouping of applications/interfaces based on source/target systems, complexity, etc. That will eventually help in structured and successful migration releases.
- Document the data mapping from staging schema which is based on the common data model to target schema and obtain signoff.
- The development will be in iterations where the first iteration will utilize the common data model, and the subsequent iteration will implement the customizations on the common data model in accordance with the State's functional requirements.
- Implement the latest or path-breaking features as applicable during development which will help develop the latest industry standards components.
- Deploy best practices, re-usable artifacts, automated tools, and accelerators as applicable across SDLC phases of migration which will help in productivity improvements
- Conduct parallel testing as is vs. to be components run to validate and compare the data results accuracy and performance benchmarking
- Low latency is achieved through increased performance in job processing, optimized job scheduling, and fine-tuned infrastructure for managing data loads.
- Production-like data (PHI-masked production data) to be used for building a new system and mock migrations to be performed in the pre-production environment with production data.
- Encourage collaboration and communication among teams and team members.

- Follow standardized procedures, terminologies, and guidelines.
- Timely closure of questions and data issues.
- Ensure that data changes to the legacy production platform are captured and migrated to the new platform.
- Repeated mock migrations iteratively using production data.
- Attempt to migrate data/entities touching multiple subject areas early on in mock migrations to uncover any data inconsistency
- Deploy MMCIS application on migrated (mock) data in test environments for early verification.

The below sections list the activities that will be performed by Celtic based on insights gained from the past/previous implementation to ensure the success of the NE DMV data conversion/migration implementation.

• Determine the load sequence:

The data in Load ready staging needs to be extracted, organized, and loaded into the MMCIS system. The data in Load ready staging will be analyzed and identified by the nature of data into different categories like the master, transactional, historical, etc. (Shown in the diagram above). Master data may be transferred first, then transactional, and then historical/audit data. The exact load sequence will be determined during data migration development.

• Perform legacy vs. MMCIS data transformation:

The MMCIS system may follow a set of configuration/code values different from the existing legacy systems. Hence the data from the legacy need to be transformed into a new set of values using conversion logic. This transformation logic will be reviewed with the State and sign-off and will be used while migrating the data from Load ready staging to the MMCIS schema.

For example, the legacy system may use codes '1' and '0' to indicate Active and Inactive status, whereas the MMCIS system may use values 'A' and 'I'. This transformation logic will be captured in mapping and signed off by the State.

The data extracted by the ETL tool from Load ready staging may be loaded into a workspace(optional) and then transformed per business rules/logic applied and loaded into the MMCIS schemas. The data lineage may include this additional step in mapping.

• *Perform data reconciliation process:* 

Celtic will ensure all valid data from the load-ready staging is migrated into the target system during the final production migration. Data reconciliation reports will be created and published to the stakeholders identified by the data governance committee or modernization PMO (project management office). These data reconciliation reports will be created during the mock migrations during the development phase of the project as well. This will help refine the data reconciliation process, mature the same, and indicate the expected outcome during the final production migration.

The reconciliation reports can contain the following:

- o List of key entities
- Number of records for the entity in load-ready staging, for example, the number of IRP Accounts
- o Number of records loaded into the target system
- o The number of records rejected
- Number of records violating a given rule, for example, referential integrity (as applicable)
- Discuss and document migration reversal strategy:

A data migration reversal strategy works as a backup plan if things go unexpected or yield unexpected results. In case of data migration, for any reason, the phase 1 migration is called off, the target data could be deleted, and the legacy source system will be brought back to resume execution.

• Discuss and document cut over approach:

The cutover is creating and executing the cutover plan to deploy the solution into production. The cutover plan for data migration should be created in alignment with the cutover plan for the entire program. This plan will include owners and signoffs responsible for conversions and verification and what conversions are required for their type during and sequence.

• Deployment confirmations:

The assumptions are confirmed prior to the final deployment:

- o The state business unit is ready for changes with the new system, including changes to business activities
- Disabled the "update" capability in the old legacy systems, which will be replaced by the MMCIS system the old system is now used for inquiry purposes only

- Final conversion activities are known and tracked during the conversion weekend
- o Deployment resources and assignments will be communicated and understood
- o Identified the final decision meeting attendees. These resources determined the final go/no-go decision
- The state will provide service/help desk procedures post-conversion.
- Conduct final data conversion steps:

The data cleansing activities will be reviewed before the final deployment to determine if all cleanup activities have been performed. The desired approach is to correct all identified data problems before extracting the final conversion data from the old systems. However, there may be instances where it is impossible to clean up all data before converting to the new system. In this instance, changes in the final deployment activities will need discussion and agree-upon the changes approved by the State. The final deployment/cut-over plan will require State acceptance of the converted data.

• Discuss and document cutover to production:

The final cutover to production will be managed using a table (checklist) with all scheduled and backup activities. This plan will identify the resources required for approval of the individual tasks with the ultimate approval by the State.

The production cutover plan will be executed over a period that will include detailed input from the other plans and areas:

- o Data conversion plan
- o Training plan
- o Testing plan
- WBS (work breakdown structure)
- PVD (product verification document)
- ICD (interface control document)

The final readiness review will be a checklist that will ensure the required areas have provided their agreement to proceed with the cutover to the new system. The cut-over checklist provides a list of items for the execution of all related activities.

The net result of these activities is the "go/no go" decision to move forward with the final steps of the transition or to back out gracefully and remedy any issues prior to a subsequent transition.

• Confirm transition phase complete:

Conduct post-cut-over diagnostic and lessons learned. The final acceptance of the production system follows this. As part of the transition, there could be fixed or enhanced items after the initial cut-over, and a timeline will be laid out for any remaining post-transition activities.

• Recommended contingency plan:

The recommended contingency plan will be to "rollback" and use the existing state IRP, IFTA, Permit, and Tax related systems in case of any "showstopper" issues are identified during deployment. The method of rollback and reentry of any transaction into the legacy State system depends on the amount of time that has transpired from MMCIS go-live to the point at which the rollback is initiated. It is recommended that a contingency/rollback plan be developed by State (with Celtic help). Any rollback plan should be of extremely short duration (a day at most), as any transactions executed during the rollback plan may have to be recreated manually.

• Discuss and document data quality strategy:

The State legacy data loaded into the Load ready staging layer is expected to have undergone a data quality check and certified by the State. Celtic will produce data reconciliation reports to review and ensure that this data available in publish layer is consumed by the data migration scripts and appropriately loaded or rejected (if it violates key rules). The proposed solution may have additional code/scripts to validate and identify duplicates or other validation scenarios to maintain data integrity throughout the data migration process. As part of this broader strategy team, Celtic may perform both unit testing and usability testing, as detailed below.

- Fixing source data quality issues
  - <u>Migration unit testing</u>: The main purpose of conversion unit testing is to verify whether migration scripts adhere to mapping specifications and to ensure that the converted data produced by these scripts are accurate compared to source data (load-ready staging layer).
- <u>Data Usability Testing</u>: Data usability testing is performed to provide quantitative and qualitative measures on migrated data quality that will help guide towards better solutions. This usability testing is usually performed using the CMCS application over the migrated data. A usability test is performed with real data early in the product test cycle to uncover bugs.
- <u>Perform mock migrations</u>: The purpose of mock conversions is to identify and resolve any conversion program issues and configuration problems ahead of time. In addition, the mock migrations provide opportunities for independent data validation of the actual data volumes and assessment of data conversion readiness and ensure that the entire data conversion process can be finished within the timeframe allocated for data conversion cutover. Mock conversions may also focus on validating/evaluating the following:
  - Formatting of data
  - Data completeness
  - Data accuracy
  - Eliminate duplicate records
  - Resolve any unexpected issues

# Approach to managing risk associated with data synchronization:

Database synchronization is the process of establishing data consistency between two or more databases. Data synchronization ensures accurate, secure, compliant data and successful team and customer experiences. Based on our experience working on various data migration projects, Celtic will work with the state to manage the following data synchronization risks.

- Security: Security and confidentiality must meet certain regulatory standards as they relate to specific industries and privacy laws. Unique systems have different policies and access requirements. Our data synchronization process will ensure that changes made to migrated data are updated to meet the standards set by state-specific security needs. Celtic will collaborate with the state to prevent Data breaches or leak problems by using industry-standard data masking and encryption techniques.
- Data quality: multiple systems used by multiple business users mean that data is structured differently throughout its lifecycle. Ongoing updates and constant validation must be integrated and synchronized from all sources while maintaining strict integrity of information within a secure environment. Celtic will place a seamless synchronization process.

- Regular synchronization of sources and targets continually improves your data's value but makes it work specifically for your business. In the case of the big bang approach, migration is executed during weekends and started early in the weekend, so after migration, ETL job execution reconciliation reports and write-back tables can be analyzed. Based on the reconciliation report analysis, which indicates the records have not migrated to the target system, combined with a detailed error description captured in the write-back table, which helps the State's business team to analyze the root cause and fix the data at the source system. Once all the data issue is fixed at the source end for the errored records captured in the write-back table the ETL Job should be re-executed to perform migration to the target system.
- Management: Celtic will ensure that data organization must be managed and integrated in real-time to ensure accuracy and
  prevent errors like rejected records or data that is in an incorrect format. In the case of the Incremental load approach, migration
  should be executed as night loads soon after business hours to avoid business impacts and perform analysis of reconciliation
  reports and write back tables. Based on the reconciliation report analysis, which indicates the records not migrated to the target
  system, combined with detailed error description captured in the write-back table, that helps the Client business team to analyze
  the root cause and fix the data at the source system. Once all the data issue is fixed at the source end for the errored records
  captured in the write-back table the ETL job should re-execute the following data during the night load to perform migration to
  the target system.
- Performance: In order to successfully synchronize data, it must pass through five phases:
  - a. Extraction from the source
  - b. Transfer
  - c. Transformation
  - d. Transfer
  - e. Load to target

Celtic will ensure that these steps are not missed or incomplete, as they can impact the result. Perform data validation and reconciliation:

o Data validation and reconciliation (DVR) is a methodology that uses process information and statistics to ensure data

validation and reconciliation by correcting measurements.

- Approach:
  - o <u>Record count check</u> The number of records identified from the source system based on the mapping document should match the target system. For example, the SELECT count (*) from the table will provide us with the number of records at the target, which is a quick and effective way to validate the record count.
  - o <u>Checking for distinct values</u> Check for distinct values available in the target table for any columns. If the specification document says that a column in the target table should have distinct columns, use a SQL query
  - o <u>Missing values</u>: Check for the mandatory field values based on application requirement. If there is no source value, then migration will default the value.
  - o <u>Incorrect values</u>: Check for data transformation based on business rules.
  - o <u>Badly Formatted Values</u>: Data loaded to MMCIS should satisfy specific formats according to the requirement. For example, the date column of the target table should store data in the format 'YYYYMMDD'.
- Data complexity: Celtic will ensure that the more data, the more complexity will not become an issue to appropriately interface data in new situations while enabling it to continue to work with the old systems. Further, as technology changes, data that is updated to a new system must be consistent with its original source and target. Data synchronization stabilizes incoming and outgoing data, ensuring it is updated and compliant across the board.
- Data error resolution process:

This section describes the process used to identify, escalate, and resolve data errors during the data conversion process

- o Analyze the data during the error occurred.
- o Report an issue with the label "CONVERTED_DATA_ISSUE"

Critical data errors prevent a record from being loaded into the target data storage and/or cause data integrity errors. These types of data errors need to be identified and addressed as soon as possible. If possible, these types of data errors need correction in the legacy system prior to subsequent extracts and loads. Critical data errors will likely prevent continuing with

other conversion loads dependent on the failed records and must be resolved quickly, or these records should be skipped or removed from subsequent conversions until fixed. Non-critical data errors are those that have invalid values or missing configuration data that will not prevent a record from being loaded. These types of errors need to be identified and addressed for resolution.

The data error resolution process involves:

- o Loading the non-critical erroneous data into the error table and analyzing data to remove the error.
- o Checking error logs for critical erroneous data and the support team does ensure correction of data immediately

# A sample Data Conversion and Migration Test Plan, sample Validation Test Plan, and sample Synchronization Test Plan from a similar project

A comprehensive data migration testing plan will be developed along with the support of the MMCIS team. Along with data migration, it also needs to consider referential constraints (setting and populating master tables first) and setting up new data in newly created target tables. Testing will also validate that default values have been assigned to target fields where values are mandatory in the target but not available in the source.

# Data Conversion Testing Approach:

Celtic will validate that the source data containing masked data from production is correctly transformed and migrated, and made available in the target applications per the proposed solution. Checks such as database SQL queries, data verification through GUI, report analysis, etc., will be done to validate the migration process.

# Unstructured Data:

Unstructured data will be migrated from source (unstructured) to target format as part of unstructured data migration by the data migration team, and the testing team will validate the data in the target system for data integrity as given in the mapping sheets.

# Validation Test Approach:

Verifying the migrated data with the application will be done in the data migration environment. This will define critical business scenarios related to data migration and validate those scenarios. Celtic team will support the MMCIS team in the preparation and execution of data migration scenarios as a part of UAT support.

# Synchronization Testing Approach:

The high level of migration accuracy will also be verified at a system level between the source and MMCIS system with specific application flow and reports.

#### 2. Technical Approach

# b. Proposed Solution, Development Approach and Architecture

- 27. Describe the solution offered, including description of software solution, software platform, and solution architecture. Please consider the following when providing a response:
- a. The NE DMV will consider a COTS, or prepackaged, off the shelf solution which is easily adaptable to account for the State DMV's specific business needs and legal or legislative requirements to provide a sufficient foundation to avoid extensive development of corebusiness processes.
- b. The bidder must provide a solution which will operate utilizing a Microsoft operating system which will encompass SQL databases, MicrosoftApplication Stack, and Microsoft Technology Stack.
- c. The NE DMV requires the MMCIS System be hosted inside the State's environment, within the State Data Center(s) in Lincoln and Omaha, Nebraska. The State OCIO operates data centers with a virtual environment capable of supporting the operation of the MMCIS system. This data center is duplicated at a second location for redundancy. The data center provides access to the Nebraska telecommunications network.
- d. The bidder must provide a solution where the System will be installed and operated within the State-owned VMware environment located in the State Data Center. The System must be capable of running under a virtualized environment, using a VMware 7 or later, not to exceed the latest version in the OCIO's environment.
- e. The bidder must provide detailed expectation of the configuration for the VMWare environment including but not limited to CPU utilization, RAM requirements, and storage facility utilization.

The Bidder must acknowledge full compliance with the VM environment.

#### **Bidder Response:**

Celtic Systems ("Celtic") is a product company focused on Motor Carrier and Motor Vehicle space with a full product suite to address all functions of the agency. Celtic products have been installed and running in *more than 18 jurisdictions in North America for more than 16 years*.

Celtic endorses and has an integrated Software Engineering Capability Maturity Model for our software development. We have established standard processes to customize and implement our product for our customers. Celtic designs, develops, delivers, and supports products to requirements for the complete life cycle of the product. We will establish and maintain the integrity of work products using configuration identification, control, status accounting, and audits. We will verify the product through Quality Assurance

methods separate from the development team to ensure the system performs as per the requirements while validating that the product fulfills its intended use when placed in the production environment.

Celtic Motor Carriers Solution (CMCS) is a web-based, roles-based, totally integrated solution that will deliver the following support to NE DMV MMCIS Modernization:

- Administration of IFTA taxation and permits as required
- IRP registration process and permits as required
- Compliance with PRISM requirements for IRP registration
- IRP and IFTA Clearinghouse processing
- Auditing of these business functions

<u>Proven Methodology</u>: Evolved over the years and matured with every installation, our methodology has IRP, IFTA, and Audit specific interventions and tweaks.

We have anticipated the complexities associated with undertaking this project and have already built a skeletal work plan with the associated tasks required to make a smooth transition to the new and exciting CMCS Solution for the NE DMV.

The Celtic Team will follow our proven Celtic System Development Life Cycle Methodology (SDLCM), combined with our internal processes and procedures, to complete this project on time and within the budget as it has been done for 18 jurisdictions. Celtic's SDLCM is designed to provide for efficient and timely program development while ensuring the highest level of quality and accuracy.

Celtic's SDLCM has evolved taking into consideration the best practices of the Software Engineering Institute (SEI) to achieve high-quality competency in the Software Development Capability Model and has combined them with the following standard industry business practices:

• Establish Detailed Project Plan – Each project activity will be defined using the Microsoft Project tracking tool and a top-level work breakdown structure (WBS) will provide the baseline for measuring project progress and will be used for project status reporting to clearly show adherence with the schedule.

- Establish Configuration Management for Project Products
- Create and document the Requirement Traceability Matrix (RTM)
- Create the Product Verification Document (PVD) Specifications
- Create and document the technical Interface Control Document (ICD)
- Define the Data Conversion Plan (with multiple trial conversions and data cleanup reports)
- Develop Testing Plans (System, Integration, and User Acceptance)
- Code and Unit Test with Prototype Presentations (using a "Sandbox")
- Perform Integration Testing
- Perform System Testing
- Perform Stress Testing
- Perform Regression Testing as required
- Develop User Manuals and Training Plan and materials
- Develop detailed Cutover plans
- Deliver Train the Trainer for leads
- Assist with User Acceptance Testing
- Deliver User Training
- Perform Final Conversion run and verification
- Implementation into Production
- Post Implementation Review
- Operations, Maintenance Support, and Enhancements

One area we believe will be able to add value as stated in our proposed project plan is the data conversion from existing database structures to a true "Common Client" database structure between IRP, IFTA, and IFTA Audit. One of the most important steps in the conversion of any database of information is to get to know the data you are converting. Celtic will work closely with NE DMV to ensure the data is as free from inconsistencies as possible. We will run reports to identify inconsistencies in the existing data for NE DMV subject matter experts to review and resolve either by manual intervention or via some automated program correction. Our resources have converted IRP, IFTA, and IFTA Audit databases from the State-grown VSAM file structures and relational database stores to DB2,

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SQL Server and Oracle.

Once we have the Common Client database structures in place, the new system will make for a much more efficient and effective database management platform.

Celtic resources have successfully converted IRP, IFTA, and IFTA Audit databases for multiple jurisdictions in the past.

# **Technical Superiority**

Modular: To granular details. It speeds up implementation and accelerates enhancements/ fixes.

Celtic uses a framework (i.FRAME.wrk) for their motor vehicles and motor carrier solutions. This framework uses the latest technology and the most flexible/scalable Service Oriented Architecture (SOA). Celtic has developed the following sharable assets:

- Common Customer module (supports both business and individual customers).
- Inventory module
- Cash drawer module
- Cart Management for payment
- Financial module
- Correspondence module for template management and correspondence tracking

<u>Open Architecture</u>: Easier to upgrade/ maintain, easier to remain at the cutting edge of technology.

Enhanced UX: Designed with keeping the user in mind. Easy to navigate, easy to learn – improves productivity.

<u>Rule-Based</u>: Business logic is externalized from code and is stored in Rule Engine and Database Tables. Makes it easy to configure with minimal or no code changes at all.

Our optional browser-based Training module (iLearn) provides training, testing, and analysis of the result with automatic prescriptive recommendations. Administrators can create new courses, manage them and monitor the progress of the trainees. This module supports training on the application rules and can be integrated for training and testing on the use of the application programs.

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- The CMCS solution is Customer Centric and provides a 360° view of the customer
- Role-based authorization
- A true browser-based environment supporting different self-service approaches
  - External users can use the same web screens used by internal users but are restricted to only those authorized functions associated with their user ID/Role
  - External users who do not have access to a computer can use "web apps" on their smart devices to perform the transaction
- Point of sale scanning, indexing, and storage for future retrieval
- Ad-hoc reporting capability
- Ensures AAA+ support by providing different options
  - o Online/context-sensitive help
  - Browser-based incident-tracking system to allow reporting of issues right from the source. The system automatically generates e-mail notifications to support staff as required and authorized persons can track the status of all issues

In summary, we believe we have the knowledge, experience, resources, proven mature methodology, framework, platform, architecture, and integrated applications to provide Nebraska with a flagship system the State will be able to build on for many years.

During the RTM and PVD documentation processes, Celtic will configure the infrastructure in the hosting environment as required by NE DMV hosted or an Azure Government Cloud-based hosted environment including the required hardware and system software, servers, firewalls, internet connectivity, backup/restore capability, disaster recovery capability all in a proposed load balanced and database mirroring set up for redundancy and maximum accessibility to the system. Part of this step is to work with the NE DMV IT experts to document all the required interfaces for access to other system data stores of information as required. During this step, we will create the Interface Control Document (ICD) which will define exactly how we will interface with the external systems.

# Here are the minimum hardware requirements for CMCS solution.

Service type	Description

Production Server	Two (4 vCPU(s), 16 GB RAM) ; Windows 2019 OS
Production Database Server	Two (8 vCPU(s), 32 GB RAM); SQL Server 2019
Nonproduction Database server	Two (4 vCPU(s), 16 GB RAM); SQL Server 2019
Nonproduction Application server	Three (2 vCPU(s), 8 GB RAM); Windows 2019 OS
VPN between Celtic and NE DMV	VPN Gateways type: CISCO ASA Enterprise
External IP address	3 Static public IP Addresses for the Production, UAT and Sandbox environments. 3 SSL certificate for the Production, UAT and Sandbox environments
Network Storage	1 TB for all environments (500 GB for production and 500 GB for non- production servers)
Network Storage for DMS	1 TB
Domain Controller	Shared
Load Balancer	Shared F5 or other existing state available option
E-mail Server	Shared
Uninterrupted Power Supply	Existing UPS will be used
Print server and printers	Existing print server and printers will be used
Workstations	<ul> <li>Workstations with</li> <li>Internet connection</li> <li>Any of the browsers like Edge, Google Chrome, Firefox, Safari browser</li> <li>Adobe Acrobat Reader</li> </ul>

#### 2. Technical Approach

# b. Proposed Solution, Development Approach and Architecture

28. Describe the location where the development of the solution will occur, and, if any part of MMCIS application development will take place outside of the United States, provide detailed documentation on the security and quality assurance processes in place to protect integrity of the solution.

#### Bidder Response:

Celtic understands and will comply with the solution security plan approach requirements of NE DMV. The development of the solution will be managed at the following location:

8961 E Bell Road, Suite 101, Scottsdale, AZ 85260; 480-682-3791 (Office); 480-991-4200 (Fax).

Celtic will prepare the Project Risk Management process to track and respond to risk events over the course of the project to ensure that:

- Actions which should reduce the probability of occurrence are effective
- Actions which should reduce the loss associated with the risk are effective, and
- When risks for which there is no possible mitigation action have reached a trigger point for the contingency plan, the contingency plan is performed.

All Celtic employees have been e-verified through our payroll processing partner. We check references provided by new employees to check for employment dates and ask prospective employees if they have a previous criminal background. We have an enterprise-wide workplace security policy that is signed by all our employees as part of our employee agreement.

We have provided personnel fingerprint cards for all of our employees to multiple jurisdiction law enforcement agencies for background checks and over the course of our 16 years in business, we have never had a background check rejected nor have we ever had any issues or incidents of inappropriate disclosure of personally identifiable information.

The following is our workplace security compliance checklist:

Workplace Security Compliance Checklist		
1.	Lock up Confidential information when you are away from your work area. Use a "Do Not Leave Confidential Information" tent card, if applicable.	
2.	Dispose of Confidential and Sensitive information appropriately (use secure delete software, a physical shredder, or a locked secure disposal bin). Do not dispose of in the home office trash cans.	
3.	Immediately retrieve all project-sensitive faxes and printouts.	
4.	Do not send unencrypted confidential information over the internet (including FAX).	
5.	Activate a password-protected keyboard/screen lock when you are away from your work area.	
6.	Secure your laptop with a locked area when not in use.	
7.	Verify all attendees on confidential conference calls.	
8.	Secure all passwords and keys.	
9.	Lock desktops after normal business hours.	
10.	If laptops are left in the workplace at the end of the business day, ensure they are locked in a secured facility.	

Workplace Security Compliance Checklist		
11.	If the voicemail system is used, on your voicemail message, advise callers not to leave any confidential information.	
12.	If applicable, ensure your Outlook Calendar can only be viewed by authorized individuals.	
13.	Portable storage media secured - all media must be considered to contain Confidential information or to be an asset that must be secured.	
14.	Sensitive personal information (SPI) about Celtic's employees, our customers, or other individuals is to be stored in a secured facility.	
15.	When transporting a laptop from one location to another, store laptops in locked vehicles out of the general view.	

The following diagram shows our proposed security solution:



- 29. Hardware and Software Architecture:
- a) Describe the hardware and software architecture and requirements of the proposed solution.
- b) Provide hardware and software architecture diagrams.
- c) Provide basic hardware, systems software (operating systems licenses, auxiliary or support systems software, etc.), and disk storagespace requirements necessary to meet or exceed the minimum requirements represented in this RFP.

Bidder Response:

The Celtic CMCS Solution will be hosted on an on-premises database located in NE DMV provisioned data centers.

Celtics' solution architect and infrastructure lead will work with the NE DMV team for doing infrastructure sizing and design, setting up the environments that include network topology, subnets, network inventory, machine interconnects, compute and storage resources, backup and disaster recovery environment specification, physical and logical diagrams.

The solution shall leverage Architecture as mentioned below and the strategy is explained below:



We expect that the State will provide the recommended hardware and software at least one month prior to the deployment of the first sandbox release as per the project plan deliverables.

Service type	Description

Production Server	Two (4 vCPU(s), 16 GB RAM) ; Windows 2019 OS
Production Database Server	Two (8 vCPU(s), 16 GB RAM); SQL Server 2019
Nonproduction Database server	Two (4 vCPU(s), 16 GB RAM); SQL Server 2019
Nonproduction Application server	Three (2 vCPU(s), 8 GB RAM); Windows 2019 OS
VPN between Celtic and NE DMV	VPN Gateways type: CISCO ASA Enterprise
External IP address	3 Static public IP Addresses for the Production, UAT, and Sandbox environments.
	3 SSL certificates for the Production, UAT, and Sandbox environments.
Network Storage	1 TB for all environments (500 GB for production and 500 GB for non-production servers)
Domain Controller	Shared
Load Balancer	Shared
	F5 or other existing state available option
E-mail Server	Shared

Uninterrupted Power Supply	Existing UPS will be used
Print server and printers	Existing print server and printers will be used
Workstations	<ul> <li>Workstations with</li> <li>Internet connection</li> <li>Any of the browsers like Edge, Google Chrome, Firefox, Safari browser</li> <li>Adobe Acrobat Reader</li> </ul>

# **Assumptions**

- NE DMV will install and configure the hardware as required
- Celtic will be provided access to the environments for deployment and production support
- The COTS Application servers for UAT, Production, are recommended to be load balanced
- High availability and database replication are recommended for the database servers

We expect that the State will provide the recommended software at least one month prior to the deployment of the first sandbox release as per the project plan deliverables.

Description	Specification
Window Server 2019 and above	Operation System

(Backward compatibility till Windows Server 2014)		
IIS 8.x (Internet Information Server)	Application Server	
.Net Framework 4.5	Application Framework	
SQL Server 2019 and above	Database	
(Backward compatibility till SQL Server 2014)		
Crystal Report Designer license for each application installed on a server	Report Generation	
ID Automation	Barcode Generator	
Workstations with	Workstations	
Internet connection		
• Any of the browsers like Edge, Google Chrome, Firefox, Safari browser		
Adobe Acrobat Reader		

# 2. Technical Approach

# c. Technical Considerations

30. Nebraska Information Technology Commission (NITC) Standards:

Describe how the proposed solution complies with the Nebraska Information Technology Commission (NITC) Standards. For the purposes of this response, refer to the following link: <u>http://nitc.nebraska.gov/standards/index.html</u>

After review of the NITC standards the Bidder will acknowledge understanding of appropriate application, adhere to, and remain in compliance with the following NITC policies and standards through the term of the contract:

- 1. NITC 2-101 Accessibility Policy nitc.nebraska.gov/standards/2-101.pdf
- 2. NITC 4-101 Social Media Guidelines nitc.nebraska.gov/standards/4-101.pdf
- 3. NITC 4-201 State Government Web Pages nitc.nebraska.gov/standards/4-201.pdf
- 4. NITC 4-202 Web Cookie Standard nitc.nebraska.gov/standards/4-202.pdf
- 5. NITC 4-203 Security Statement: State of Nebraska Home Page nitc.nebraska.gov/standards/4-203.pdf
- 6. NITC 5-101 Enterprise Content Management nitc.nebraska.gov/standards/5-101.pdf
- 7. NITC 5-201 Email Standard For State Agencies nitc.nebraska.gov/standards/5-201.pdf
- 8. NITC 5-204 Email; Linking personal portable devices nitc.nebraska.gov/standards/5-204.pdf
- 9. NITC 7-101 Acceptable Use Policy nitc.nebraska.gov/standards/7-101.pdf
- 10. NITC 7-102 DNS Forwarding Standard nitc.nebraska.gov/standards/7-102.pdf
- 11. NITC 7-103 SMTP Routing Standard nitc.nebraska.gov/standards/7-103.pdf
- 12. NITC 7-104 Web Domain Name Standard <u>nitc.nebraska.gov/standards/7-104.pdf</u>
- 13. NITC 7-105 Wireless Local Area Network Standard nitc.nebraska.gov/standards/7-105.pdf
- 14. NITC 8-101 Information Security Policy Purpose nitc.nebraska.gov/standards/8-101.pdf
- 15. NITC 8-102 Scope nitc.nebraska.gov/standards/8-102.pdf
- 16. NITC 8-103 Roles and Responsibilities <u>nitc.nebraska.gov/standards/8-103.pdf</u>
- 17. NITC 8-104 Policy Exception Process nitc.nebraska.gov/standards/8-104.pdf
- 18. NITC 8-201 Acceptable use nitc.nebraska.gov/standards/8-201.pdf
- 19. NITC 8-202 Change control management nitc.nebraska.gov/standards/8-202.pdf
- 20. NITC 8-203 Multi-Function Devices nitc.nebraska.gov/standards/8-203.pdf
- 21. NITC 8-204 Email nitc.nebraska.gov/standards/8-204.pdf
- 22. NITC 8-205 Portable IT Devices nitc.nebraska.gov/standards/8-205.pdf
- 23. NITC 8-207 Facilities; Identification badges; visitors nitc.nebraska.gov/standards/8-207.pdf
- 24. NITC 8-208 External Service Providers nitc.nebraska.gov/standards/8-208.pdf
- 25. NITC 8-211 System Security Plan nitc.nebraska.gov/standards/8-211.pdf
- 26. NITC 8-301 Remote Access nitc.nebraska.gov/standards/8-301.pdf

27. NITC 8-302 Passwords nitc.nebraska.gov/standards/8-302.pdf 28. NITC 8-302.1 Public Accounts; passwords nitc.nebraska.gov/standards/8-302.1.pdf 29. NITC 8-303 Identification and authorization nitc.nebraska.gov/standards/8-303.pdf 30. NITC 8-304 Privileged access accounts nitc.nebraska.gov/standards/8-304.pdf 31. NITC 8-401 Network Documentation nitc.nebraska.gov/standards/8-401.pdf 32. NITC 8-402 Network transmission security nitc.nebraska.gov/standards/8-402.pdf 33. NITC 8-403 Network architecture requirements nitc.nebraska.gov/standards/8-403.pdf 34. NITC 8-404 External Connections nitc.nebraska.gov/standards/8-404.pdf 35. NITC 8-405 Wireless networks nitc.nebraska.gov/standards/8-405.pdf 36. NITC 8-502 Minimum user account configuration nitc.nebraska.gov/standards/8-502.pdf 37. NITC 8-503 Minimum Server Configuration nitc.nebraska.gov/standards/8-503.pdf 38. NITC 8-504 Minimum workstation configuration nitc.nebraska.gov/standards/8-504.pdf 39. NITC 8-505 Minimum laptop configuration nitc.nebraska.gov/standards/8-505.pdf 40. NITC 8-506 Minimum mobile device configuration nitc.nebraska.gov/standards/8-506.pdf 41. NITC 8-507 System maintenance nitc.nebraska.gov/standards/8-507.pdf 42. NITC 8-601 Application Documentation nitc.nebraska.gov/standards/8-601.pdf 43. NITC 8-602 Application Code nitc.nebraska.gov/standards/8-602.pdf 44. NITC 8-603 Separation of test and production environments nitc.nebraska.gov/standards/8-603.pdf 45. NITC 8-604 Application development nitc.nebraska.gov/standards/8-604.pdf 46. NITC 8-605 Web applications and services nitc.nebraska.gov/standards/8-605.pdf 47. NITC 8-606 Use of cloud storage nitc.nebraska.gov/standards/8-606.pdf 48. NITC 8-607 Cloud computing nitc.nebraska.gov/standards/8-607.pdf 49. NITC 8-701 Auditing and compliance; responsibilities nitc.nebraska.gov/standards/8-701.pdf 50. NITC 8-702 Awareness and training nitc.nebraska.gov/standards/8-702.pdf 51. NITC 8-703 Security reviews; risk management nitc.nebraska.gov/standards/8-703.pdf 52. NITC 8-704 Logging nitc.nebraska.gov/standards/8-704.pdf 53. NITC 8-705 Logging format, storage and retention nitc.nebraska.gov/standards/8-705.pdf 54. NITC 8-706 Logging; auditable events nitc.nebraska.gov/standards/8-706.pdf 55. NITC 8-707 Logging; audit log contents nitc.nebraska.gov/standards/8-707.pdf 56. NITC 8-708 Logging; audit review, monitoring findings and remediation nitc.nebraska.gov/standards/8-708.pdf 57. NITC 8-709 Logging; application logging review and monitoring nitc.nebraska.gov/standards/8-709.pdf 58. NITC 8-801 Incident response nitc.nebraska.gov/standards/8-801.pdf 59. NITC 8-802 Incident response plan nitc.nebraska.gov/standards/8-802.pdf 60. NITC 8-803 Penetration testing nitc.nebraska.gov/standards/8-803.pdf 61. NITC 8-804 Vulnerability scanning nitc.nebraska.gov/standards/8-804.pdf 62. NITC 8-805 Malicious software protection nitc.nebraska.gov/standards/8-805.pdf 63. NITC 8-806 Security deficiencies nitc.nebraska.gov/standards/8-806.pdf 64. NITC 8-901 State Data nitc.nebraska.gov/standards/8-901.pdf 65. NITC 8-902 Data classification categories nitc.nebraska.gov/standards/8-902.pdf 66. NITC 8-903 Data inventory nitc.nebraska.gov/standards/8-903.pdf

67. NITC 8-904 Data security control assessment nitc.nebraska.gov/standards/8-904.pdf

68. NITC 8-905 Data Sharing <u>nitc.nebraska.gov/standards/8-905.pdf</u> 69. NITC 8-906 Data Destruction <u>nitc.nebraska.gov/standards/8-906.pdf</u>

70. Future NITC policies established by the Nebraska Information Technology Commission which apply to this contract.

*The NE DMV will provide written notice to the Contractor of updates or additions to the established NITC policies which will apply to this contract.

#### **Bidder Response:**

Celtic has read and shall comply with this requirement.

# 31. OCIO Shared Services:

Describe how the proposed solution will utilize OCIO Shared Services for storage, database hosting, and/or virtualization. The OCIO maintainsenterprise shared services, including SAN/NAS storage, VMware virtualization technology, and database hosting.

## Bidder Response:

The Celtic CMCS Solution will be deployed on NE DMV Hosted Environment. The SAN/NAS storage will be used to create Required VMs provided the SAN/NAS has required free space available. VMs will use only the Shared services which are required, and they will also configure in such a way that they will only communicate with the required resources. We can restrict them from accessing other infrastructure via Windows firewall rules if needed.

32. User Authentication/Password Management:

Describe how the proposed solution will provide user authentication and management of password set-up/reset for NE DMV staff and business partners (e.g., carriers and home office employees.).

#### Bidder Response:

Our CMCS solution is built on top of a secured solution architecture that controls user authentication and encrypts confidential user information such as passwords. The system supports single sign-on authentication and is configurable to support authentication using both LDAP and Azure.

The CMCS User Management module allows the authorized users to create, maintain or reset a password for new and existing users. The carriers and/or authorized users can set up/reset and manage passwords through the Forgot Password and Reset Password functionality. The Forgot Password functionality allows only the carrier users to request a new password to access the system; whereas the authorized users can use the Reset Password functionality to reset the password of their user account or for other users.

Below is a sample screenshot of the COTS system Forgot Password functionality:

Forgot Password			
	$( \setminus \setminus )$	( \ \ )	( / / )
*User ID	Secret Question	Secret Answer	
OR			
Contact Email	Confirm Email		
	Proceed	ish Quit	

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# Below is a sample screenshot of the COTS system Reset Password functionality:

Reset Password			
Reset Password			^
* User ID	* Password	* Confirm Password	
		Refresh Quit Next	

33. Workstation hardware requirements:

Describe minimum and optimal workstation hardware requirements for the proposed solution to perform.

#### Bidder Response:

The following are the minimum workstations requirements for the Celtic COTS solution to perform:

- Internet connection
- Any of the browsers like Edge, Google Chrome, Firefox, Safari browser
- Adobe Acrobat Reader

# 2. Technical Approach

# c. Technical Considerations

# 34. Bandwidth:

Describe minimum and optimal bandwidth required for the proposed solution to perform.

# Bidder Response:

The bandwidth requirements for the proposed CMCS solution are as follows:

- Minimum bandwidth 100 MBPS
- Optimum Bandwidth 1 GBPS
- Internet bandwidth 100 MBPS

# 35. Software:

Describe the minimum workstation software requirements for the proposed solution to perform. The System shall operate within the most current versions of applications including but not limited to Chrome, Edge, Firefox, or Safari.

# Bidder Response:

The Celtic CMCS solution is a browser-based application that consists of a modernized responsive interface that adapts to desktop, or handheld devices. Our solution shall be accessed and compatible with standard browsers like Chrome, Edge, Firefox, and Safari.

36. Software:

Identify solution specific software necessary for the proposed solution to operate in the workstation environment described in Question 35, Workstation hardware requirements.

# Bidder Response:

The Celtic CMCS solution is accessible on all the latest versions of the browsers listed in response to Question 35. In addition, Celtic provides a Client Package software coupled with CTS-Doc. While users can upload or view documents using the COTS solution, Celtic encourages the installation of Client Package software to utilize certain CTS-Doc-specific functionalities such as document scanning and storage of scanned documents for future retrieval.

# 37. Software:

Describe how the proposed solution provides for online services to be available for use on PCs and mobile devices, including but not limited to tablets and smartphones.

## Bidder Response:

The following diagram depicts how the COTS solution screen layouts automatically adapt to any device screen size including PCs, tablets, and other handheld devices.



38. Fully Replicated Databases:

Fully replicated databases with real-time data to be utilized for data intensive canned reports, ad hoc reporting, ad hoc queries, etc. as well as replicated databases for the development, testing and production environments are required.

Describe the proposed solution for fully replicated databases. The description shall include how the proposed solution will include replicated databases with real-time data for all aspects of the system described above. The response may recommend solutions for interfaces between the production database and the replicated database.

# Bidder Response:

Celtic's proposed technology stack includes SQL server database as the relational data store for the CMCS Solution, it is intelligent, scalable, database service that combines the broadest SQL Server engine compatibility with all the benefits of a fully managed service.

SQL instances supports near real-time data replication which enables to have readable secondaries, Celtic proposes to leverage this feature for real-time reporting needs without sacrificing on the performance on the transactional overload's performance.

39. Fully Replicated Database:

Fully replicated databases with real-time data to be utilized for data intensive canned reports, ad hoc reporting, ad hoc queries, etc., as well as replicated databases for the development, testing and production environments, are required.

Describe the approach for on-going data synchronization.

#### Bidder Response:

Celtic shall review and leverage one or combination of the replication capabilities as mentioned below to maintain the data integrity between servers.

Туре	Replication Mechanisms
Servers/Virtual Machines	VM based replication mechanism - Celtic shall review and analyse the existing Disaster Recovery capabilities of the virtualized software and shall leverage the same for replicating the virtual machines across to the Datacentre
Storage/SAN – Unstructured Data	Celtic shall leverage the existing <b>SAN to SAN replication mechanism</b> for any file-based replication/block level replication
Database – Structured Data	Celtic shall leverage the inherent capabilities of the Microsoft SQL server such as database Mirroring/ log shipping for replicating the data to the alternate Site Based on the existing Network bandwidth availability between Primary and Secondary Server, asynchronous replication shall be followed which can have a RPO value of up to One hour. This is subject to the Data size that is replicated and existing Network bandwidth availability. NE DMV can increase the network bandwidth based on the recommendations provided by Celtic.

# 2. Technical Approach

# c. Technical Considerations

40. System Extensibility:

It is anticipated the number of transactions, system users, and programs will continue to grow within the Modernized Motor Carrier Information System (MMCIS). Describe the ability of the proposed solution to accommodate such growth and extensibility to additional business areas.

# Bidder Response:

Celtic uses a framework (i.FRAME.wrk) for their motor vehicles and motor carrier solutions. This framework uses the latest technology and the most flexible/scalable Service Oriented Architecture (SOA).

<u>Open Architecture:</u> Easier to upgrade/ maintain, easier to remain at the cutting edge of technology.

Our CMCS products for IRP, IFTA, Audit, and CVIEW are fully mature, totally integrated, highly scalable, and ready to implement, satisfying the NE DMV's requirements. We employ continuous improvement techniques to capitalize on advanced technology and meet the advanced requirements of users which was not possible in the past.

<u>Large installed base</u>: Wisdom of many jurisdictions built into products, and lessons learned from many installations built into the methodology.

<u>Technically superior, scalable, modular, and flexible products:</u> We have worked with carriers, jurisdictions, service providers, and truck drivers to design each screen and develop the optimal navigation for processing motor carrier transactions. We know there will always be improvements that can be made as technology advances and customer requirements change. Our support and maintenance team is constantly looking at ways to address new challenges from the motor carrier community.

# 41. System Extensibility:

The proposed hardware solution must have separate data, application, and web tiers to facilitate expansion. Describe how the proposed solution meets this requirement.

# Bidder Response:

The Celtic CMCS solution is developed on a Service Oriented Architecture (SOA) with a presentation layer, a business logic layer, and a data layer. The layers are independent of each other in that you can easily make changes to the presentation layer without affecting the business logic layer or the data layer. The data layer can be any of many relational database engines including SQL Server, Oracle, and DB2. We have built our solution in both a Java and .Net structure and have chosen .Net for this engagement in keeping with the NE DMV environment.

The following features and diagram depict our Service Oriented Architecture:

The CMCS Solution is built on multilayered MVC architecture as follows:

- It is multilayered consisting of the MVC presentation layer, process layer, service layer, and integration layer. This design makes the structure flexible, scalable, and easily maintainable.
- Our Process Layer separates the process and business rules and provides multiple options to implement, either by native code or by using industry-standard rules and workflow engines.
- Our Service Layer contains all the application-specific business logic that will be used irrespective of the mode of access. For example, the same application business edit logic is used by an online web interface, web service interface, or batch interface.
- Our Data Layer encapsulates all the database access-related logic
- All other interfaces (synchronous/asynchronous, inbound/outbound) are managed through our Universal Interface Controller (UIC).
• Our Presentation Layer provides the flexibility to customize/configure the presentation as per client needs. It accommodates web browsers as well as mobile applications, e-forms, etc.

# Below is a sample of our technical architecture:



Below is a sample of our solution architecture:



# 42. Test activities:

Describe the approach for meeting the System test requirements as identified in the Scope of Work.

## Bidder Response:

# Celtic will apply industry-standard quality processes and metrics to deliver a quality solution for NE DMV.

The comprehensive Master Test plan will include different types of testing, test plans, test environments used for different types of testing, test data planning/creation, defect management using incident management tools, risk identification, assessment, impact analysis, and mitigation strategies that will be developed as per industry standards. The same will be shared with NE DMV as part of the testing deliverable.

Different types of testing will be carried out in the agile methodology, with one release to production at the end of implementation. This approach is given in the release plan.

The following diagram depicts the testing team's activities during the Agile testing approach.

Initiation	Active participation in requirements workshop to ensure the testable (Epics, User Stories)Prepare the test strategy and high-level estimates for different testing requirements (Epics, User Stories)Prepare the test the test prepare the test the test prepare the test testing types in scope (Static, Functional, etc.)Identify the Automatio n tools for testing scopePlan for all the tests, including non- functional testsDefine the Acceptance the tests, including non- functional testsPrioritize the user storiesPrioritize the user stories	
Sprint Planning	Next level estimates for various types of testing including automationParticipate in sprint backlog and sprint goal settingCreate the <b>Test Backlog</b> , to track the progress of testingDesign tests	
Spring execution and monitoring	Prepare test cases and automation test scriptsPrepare test dataConduct functional testing on the buildConduct regression test as applicableDefects tracked to 	
Sprint retrospective and review Sprint review and retrospective meetings		
Program Increment	Conduct regression testConduct system integration test and NFR test as applicable for the Program IncrementConduct exploratory testing and applicableDefects are tracked to closureMetrics are captured and 	
Solution Increment	Conduct regression testConduct system integration test and NFR test as applicable for 	
Release	Conduct smoke and regression testTest NFR as applicable for the ReleaseProvide support to UATDefects are tracked to closureMetrics are captured and analyzed for improvements in next Release	

# **Testing Activities in Agile**

# **Testing Approach**

To meet the requirements of the State, Celtic will perform several types of testing and align with the proposed agile methodology as depicted below the sample chart:

	Sprint	Program Increment	Solution Increment Release	
Testing Types	•Code Reviews •Walkthroughs •Unit Testing •Configuration Testing •Data Validation •Regression Testing •Automation	<ul> <li>Smoke Testing</li> <li>Integration Testing</li> <li>Conversion Testing</li> <li>Regression Testing</li> <li>Automation</li> <li>Browser Compatibility Testing</li> <li>Mobility Testing</li> <li>Performance Testing(Load, Stress, Endurance)</li> <li>Accessibility Testing</li> <li>Internationalization and Localization (Multi-lingual)</li> <li>Role Based Testing</li> </ul>	<ul> <li>Integration Testing</li> <li>Conversion Testing</li> <li>Regression Testing</li> <li>Automation</li> <li>Performance Testing(Load, Stress, Endurance)</li> <li>Security (Vulnerability, Penetration)</li> <li>Disaster Recovery Testing</li> <li>User Acceptance Testing</li> </ul>	
Testing Activities	<ul> <li>Sprint Test Planning</li> <li>Test Case preparation (all applicable test types)</li> <li>Test Data preparation</li> <li>Test case execution</li> <li>Automation scripting</li> <li>Code reviews</li> <li>Defect logging and triaging</li> <li>Daily Test Execution Status Report (DSR)</li> <li>Building Regression Suite</li> <li>Test Report</li> </ul>	<ul> <li>PI Test Planning</li> <li>Test Case preparation (all applicable test types)</li> <li>Test Data Preparation</li> <li>Test case execution</li> <li>Automation scripting</li> <li>Defect logging and triaging</li> <li>Daily Test Execution Status Report (DSR)</li> <li>Building Regression Suite</li> <li>Integration test planning and execution</li> <li>UAT test planning (Test case and test data preparation)</li> <li>Test Report (all applicable test types)</li> </ul>	<ul> <li>Integration Test execution (SIT)</li> <li>Test Data Preparation (all applicable test types)</li> <li>Defect logging and triaging</li> <li>Daily Test Execution Status Report (DSR)</li> <li>Building Regression Suite</li> <li>UAT test case execution</li> <li>Test Report (all applicable test types)</li> <li>UAT test case execution</li> </ul>	

#### **Testing Types by Agile Cadence**

## **1. Sprint Testing**

Sprint level Testing verifies that each module of the proposed solution's functionalities works according to the State's requirements in the non-integrated environment. It involves testing functionalities as part of use stories planned for each sprint. The below testing tasks are performed at the Sprint level:

- Requirement validations
- Test scenarios/case preparation
- Test data preparation
- Test executions
- Defect management

- Defect report
- Test sign-off for Sprint

# 2. Integration Testing

Interface testing will ensure that all module dependencies are functioning as expected and that data integrity is maintained between separate modules for the entire system. In this phase, Celtic will test the applications in the integrated environment, and the primary focus is to validate the interfaces between source and destination applications. Business scenarios will be tested in an integrated code during this phase.

Following integration checks will be in scope:

- a. Request, response, and error message validation between core product suites using middleware.
- b. Data flow and data integrity validation between core product suites.
- c. Strategic interface validations.
- d. Interface validation till middleware layer for NE DMV legacy applications and External applications.

Both real-time and batch interfaces will be validated as part of Interface testing.

# Approach:

- a. All the functionalities listed under the features to be tested will be tested as part of the process flows, business rules, and field/UI level validations.
- b. Test cases will be logically grouped based on the functional modules, and execution will be carried out sequentially.
- c. Test case execution will be carried out using green field data (new data) or migrated data (legacy data) as per the applicable scenarios.

# **3. Regression Testing**

Regression testing is the process of validating the impact on the existing functionality due to the new changes/defect fixes. Regression testing will ensure the code being released will be fully tested and stable.

Regression testing will be performed as part of each sprint level so that we can validate that the functionality delivered in earlier sprints is working fine. The approach for identifying the regression suite is defined in the approach section.

#### Approach:

- a. During user story analysis and test case preparation, the key scenarios are marked for regression testing, and these will be added to the master regression suite. The business analyst and business teams will review this regression suite to ensure regression coverage.
- b. The manual regression execution will be done for the test cases which cannot be automated.
- c. Key regression test cases will be automated so that they can be used in further sprints and releases.

#### 4. Cross Browser testing

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product complies with Cross Browser compatibility requirements. The following execution approach will be used for Cross browser testing.

#### Approach:

- a. Ensure test cases cover all the end-to-end transactions of the application.
- b. Execute the test cases in Google Chrome, Windows Edge, and Firefox browsers assuming Edge is the Primary Browser for testing.
- c. Validate application behavior is consistent across all browsers.
- d. Validate browser-specific defects are fixed in all browsers.

Note: Latest Browsers will be used for Cross-Browser testing as per agreement with NE DMV MMCIS.

### 5. Data Migration Testing

Data migration is a process that involves the migration of data from source to target. Along with data migration, it also needs to consider referential constraints (setting and populating master tables first) and setting up new data in a newly created table or attributes in the target database.

Testing must also validate that default values have been assigned to target fields where values are mandatory in the target but not available in the source.

#### Features to be tested:

Structured data and unstructured data will be validated as part of data migration testing.

#### Note:

- a. A complete list of structured and unstructured data to be migrated in the core systems will be captured in the data migration strategy document prepared by the data migration team.
- b. Sample validation of bulk uploads will be tested as part of data migration testing, the solution is not yet finalized, and the testing team will refer to the data migration strategy document prepared by the data migration team.

#### Approach:

- Structured data: Validate if the data from the source containing masked data from production is correctly transformed & migrated and is made available in the target applications according to the new solution.
- Checks such as database SQL queries, data verification through GUI (Celtic application), report analysis, etc., will be performed to validate the migration process.
- Unstructured Data: Unstructured data will be migrated from the source (unstructured) to the target (structured) format as part of the unstructured data migration by the data migration team. The testing team will validate the data in the target system for data integrity, as provided in the mapping sheets.

#### 6. Security Testing

The proposed CMCS solution is deployed in multiple jurisdictions, and the product is compliant with IT industry security standards. However, we will be testing the customized product to verify that the CMCS solution meets the security standards according to NE DMV requirements. Security testing will be planned before go-live during the pilot testing phase.

The main objective of security testing is to ensure that the NE DMV MMCIS Solution is free from key OWASP Security Vulnerabilities.

#### Key Differentiators:

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- The solution will be compliant with the OWASP (Open Web Security Project) and SANS 25 guidelines in our security testing services, along with PCI-DSS Standards as per the application-specific requirements.
- Static and Dynamic security analysis.
- Security testing SMEs compliance assessment with security standards.
- Experience in handling various security testing projects with complex business logic.

# 7. Performance Testing

The proposed CMCS solution is already deployed in multiple jurisdictions, and the product is already compliant with industry-standard performance parameters. However, we will be performing performance testing of the customized product to verify that the CMCS solution meets the performance standards according to NE DMV requirements. Performance testing will be planned before go-live during the pilot testing phase.

Performance testing will be done for in-scope applications and modules based on the feasibility analysis. It includes load, stress, endurance, and volume testing. Performance scripts will be developed in a dedicated integrated or pre-production environment, and the same will be used for execution in the respective environment. A production copy of the data will be loaded into the database prior to performance testing in the pre-production environment.

Business critical transactions, as well as high-volume transactions, will be identified for performance testing based on the criteria below.

- Peak hour user load
- Average hour user load
- Peak-hour transaction volumes
- Average hour transaction volumes
- Future volume forecast
- User concurrency
- Segregation of web and mobile load

Types of Performance Testing considered in scope:

• Load Test: To validate the performance when applied to peak load.

- Stress Test: To validate the performance when applied to a very heavy load (considering future growth) to identify the performance bottlenecks.
- Endurance Test: To validate performance when applied to peak load for a longer duration to see the impact on system performance in terms of response time, memory leaks, etc.

We assume that the Production copy of data will be loaded into the database prior to performance testing in the pre-production environment by the NE DMV team. Performance testing will be carried out to emulate a production-like scenario where OLTP and batch execution will be executed. Also, the load will be distributed in accordance with the Non-Functional Requirements (NFR) that were provided to simulate the number of transactions and the user load. Based on non-functional requirements, a workload will be designed.

# 8. User Acceptance Testing

Celtic will provide support to NE DMV acceptance testers in setting up UAT test data, management of testing tools, defect tracking, and defect documentation. Training manuals will be leveraged for training users on the core system and training them on relevant testing tools.

UAT will have the following phases at the following high level:

- UAT strategy finalization for risk identification, prioritization, and creating a risk-based testing approach.
- UAT test planning and defining acceptance criteria.
- Helping to create business scenarios/ use cases/ scripts across all the areas of testing in scope.
- UAT environment set up.
- Set up test data for UAT and confirm that migrated data is available prior to testing.
- Test execution and defect reporting.
- Report the progress of test execution.
- Summarize test results and obtain signoff by NE DMV acceptance manager.

# **Testing Status Reporting:**

As part of the project execution, a testing status report will be prepared for each planned test cycle that will provide a comprehensive report on the testing cycle for the application. This document consists of the following sections:

a. Testing overview.

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- b. Test results summary (Including defect summary).
- c. Analysis, conclusion, and recommendation on test cycle status.
- d. Azure DevOps (ADO) shall be used to track the progress of the project from various viewpoints. It can be used to check the percentage of completion for test cases against the planned test cases and the pass/fail status of the test cases. It can also generate reports related to the number of open defects and other such reports.
- e. Weekly status reports: The status will be communicated weekly and will contain the completion status of planned activities for the week and future task planning.
- f. The defect report will be shared along with the test execution status during the execution phase.
- g. Defect status calls will be scheduled as part of the defect management process.

43. Test activities:

Describe the approach for Unit Testing.

#### Bidder Response:

# **Sprint Testing**

Sprint level Testing verifies that each module of the proposed solution's functionalities works according to the State's requirements in the non-integrated environment. It involves testing functionalities as part of use stories planned for each sprint. The below testing tasks are performed at the Sprint level:

- Requirement validations
- Test scenarios/case preparation
- Test data preparation
- Test executions
- Defect management
- Defect report
- Test sign-off for Sprint

## 44. Test activities:

Describe the approach for System Testing.

## Bidder Response:

# 45. Test activities:

Describe the approach for User Acceptance Testing (UAT).

## Bidder Response:

46. Test activities:

Describe the approach for Performance Testing.

## Bidder Response:

# 47. Test activities:

Describe the approach for Vulnerability Testing.

## Bidder Response:

## 48. Test activities:

Describe the approach for Data Conversion Testing.

## Bidder Response:

49. Test activities:

Describe the approach for Regression Testing.

## Bidder Response:

50. Test activities:

Describe the approach for Compatibility Testing.

## Bidder Response:

# 2. Technical Approach

# c. Technical Considerations

51. Test activities:

Provide an example of a Unit Testing Plan.

## Bidder Response:

The testing phase cannot begin until the unit test performed by the developers is certified as ready for system testing.

The goal of testing is to ensure that Celtic meets the business and technical needs of its end users. Following is an example of our unit testing plan:

- Functionality: Program components meet the functional requirements; this step is performed during all test stages. Functionality is measured using a requirements coverage/trace matrix and tracking test execution status.
- Reliability: Program components perform on a repeated accurate basis without problems; this step is performed during the system
- Integration and acceptance test stages. Reliability is measured using a defect tracking system, and the number of defects introduced after each build is an indicator of how stable the code base is.
- Traceability: The program components satisfy one or more of the design requirements identified during analysis of the new functionality.
- Interoperability: Program components perform accurately when integrated into the subsystem as intended, as both feeder and receiver systems as well as the subsystems integrate properly into the application; this step is performed during all test stages.
- Performance: Program components perform within the technical requirements. Stress and volume tests verify the system is performing to defined service levels.
- Usability: With the new program components integrated, the system satisfies its intended function.
- Customer Experience Testing: To verify if the system design is straightforward, direct and customer friendly?

# 2. Technical Approach

# c. Technical Considerations

# 52. Test activities:

Provide an example of a System Testing Plan.

# Bidder Response:

# Test Plan:

Celtic will work with NE DMV to design and deliver a comprehensive test plan, test cases, test scripts, and documentation for comprehensive test management and test strategy for NE DMV, but not limited to, the following sections:

- 1. Introduction
  - 1.1. Purpose
  - 1.2. Objective
  - 1.3. Project Background
- 2. Release Scope
  - 2.1. Test coverage for various releases
  - 2.2. Types of Testing (functional, integration, end-to-end, security, performance, usability and accessibility, customer experience, cross-browser, data migration testing, etc.) and the testing approach.
- 3. Software Life cycle
  - 3.1. Testing approach
  - 3.2. Test planning
  - 3.3. Test Execution
  - 3.4. Entry and Exit criteria
  - 3.5. Testing Tools (for e.g., ADO, JIRA, Selenium, etc.)
  - 3.6. Test Environment and Infrastructure
  - 3.7. Test Data management
  - 3.8. Test Results documentation

- 3.9. Test Suspension/Resumption Criteria
- 3.10. Configuration Management
- 4. Assumptions
- 5. Dependencies
- 6. Constraints
- 7. Risks and mitigation Plan
- 8. Project Management
  - 8.1. Project Schedule
  - 8.2. Roles and responsibilities
  - 8.3. Testing Deliverables
  - 8.4. Communication and status reporting
  - 8.5. Testing Metrics
  - 8.6. Code promotion/migration process
  - 8.7. Change management
  - 8.8. Escalation procedures
- 9. Defect Management
- 10. Testing Status Reporting
- 11. UAT (User Acceptance Testing) support

# **Testing Activity:**

System Integration testing (SIT) will be carried out after each module has undergone unit testing and that testing has been passed. During SIT, Celtic testers will test the system after all sub-modules and third-party interfaces has been integrated. The result of SIT will then be passed on to UAT.

The key activities of each SIT phase are defined below:

# **Entry Gates**

All user stories are completed and signed- off	UI Validations Completed
Completion of unit testing	Priority bugs have been fixed and closed
Test cases/scripts are ready	Ensured that there are no open     showstoppers / critical defects
All environments and access requests     sorted out	SIT users identified

# **Objectives**

•	Interactions between the modules	•	Interfaces with other systems
•	Data flow and data integrity is maintained	•	Performed by testers
	across applications		

# Exit Criteria

•	Successful execution of the test scenarios	<ul> <li>Satisfactory execution of stress, performance, and load tests</li> </ul>
•	Priority bugs have been fixed	

# 2. Technical Approach

# c. Technical Considerations

# 53. Test activities:

Provide an example of a User Acceptance Testing (UAT) Plan.

#### Bidder Response:

User Acceptance testing will be the last step before the go live. UAT will be undertaken by NE DMV subject matter expert and/or a business user.

Similar to the system integration testing, effective governance will be enforced for UAT to ensure that strong quality gates along with the defined entry and exit criteria.

The key activities of each UAT phase are defined below:

# **Entry Gates**

All user stories are completed and signed- off	UI Validations Completed
Completion of system and integration     testing	Successful UAT sanity check is performed
Completion of regression testing	Ensured that there are no open     showstoppers / critical defects
Validations are undertaken against the functional specifications	All environments and access requests     sorted out
Business users identified	

# **Objectives**

•	All business functions are stable	• Critical business processes are intact &	
			work as expected

All transactions are properly integrated into the business process	• Data flow and data integrity is maintained across applications
Ensure compatibility to browsers	<ul> <li>Business user review south on the usability aspects</li> </ul>
Performance of the application	•

# Exit Criteria

•	Acceptance of Business Flows against	•	Priority bugs have been fixed
	Business Requirements by End User of the		
	System		

54. Training:

Describe the approach for meeting the training requirements as identified in the Scope of Work.

## Bidder Response:

It is essential to have well-trained internal and external users who have the requisite skills, knowledge, and level of user adoption to drive the value associated with the solution. Defining the approach and tactics to achieve these objectives requires a comprehensive Training Strategy.

The following diagram outlines Celtic's approach toward training its customers -



# **Training Approach**

To train the end-users, Celtic will require subject matter expertise on modernized NE DMV's business processes. Likewise, NE DMV Trainers will require expertise in the CMCS solution to support their end-user population post-training. Celtic instructors will be paired with the NE DMV Trainers to deliver role-based end-user training. Celtic and NE DMV trainers will be present in the classroom/ virtual classroom. Celtic trainers will focus on system administration processes, while NE DMV TTTs (Train the Trainer) will focus on business-use discussions as well as supporting practice activities during and after classroom training is completed.

In creating the Training Strategy and Plan, the following guiding principles are considered:

• Training will focus on educating end-users on how to utilize the system and applicable manual process steps in support of their job activities, not just how to use the system.

- Delivery of high-quality curriculum, courseware, and technology that meets the evolving needs of target end-user populations.
- Standardized training material across the organization that incorporates applicable manual steps that form part of the end-to-end processes.
- Allow NE DMV Trainers to familiarize themselves with system functionality as early as possible. Providing access to the training environment, providing adequate support, and taking advantage of communication activities to introduce major changes and benefits.
- Utilize NE DMV Trainers to provide post-Go Live support on system usage to end users post Go Live in each Release.

# 55. Training:

Describe the various types of curriculum and training materials created by the Bidder's training team to support the System. Describe how these materials support a blended learning approach for the user training roles identified in the Scope of Work.

## Bidder Response:

Celtic's CMCS Project implementation revolves around a series of planned activities and documents as follows:

- 1. Celtic will build a COTS Product Verification Document (PVD) whereby each piece of functionality will be addressed by the State Business Area Experts (BAEs) and the Celtic Subject Matter experts (SMEs) to ensure that each piece is consistent with NE DMV requirements. Using the PVD, we will configure and customize the COTS solution where necessary.
- 2. The Interface Connectivity Document (ICD) defines all the external interfaces and communications carried out by the Celtic system, with the jurisdictions existing systems, and any third-party systems that are necessary to the overall performance. The initial session will be held on-site in Nebraska, and WebEx will be used as required for review and finalization.
- 3. Database Document This document will contain the logical/physical data model and data dictionary.
- 4. Testing Document This document lays out test scenarios and test scripts for the various levels of testing, including unit testing, and integrated system testing, both done at Celtic and at the customers.
- 5. Training Material This includes a form of on-site in-person training, training manual (functional and administrative), and optionally may include online video modules that cover the basic operations.
- 6. User Manual Celtic provides a fully integrated online user guide for all functions of the system. An online context-sensitive help functionality is also available on data entry screens. The Frequently Asked Question (FAQ) feature is provided to the users and provides detailed answers and screenshots to help the users through specific scenarios. As and when any changes are done to the system, user manuals, and FAQs are updated for the related sections.
- 7. Build Book This document will provide details of tools, technologies, versions, and stepwise installation instructions of CMCS Solution.

- 8. Cut-over Plan This document covers the detailed step-by-step methodology by which the new system is tested individually, and then (typically over a weekend) replaces the old system. This plan includes the final acceptance testing and any fallbacks that may be needed.
- 9. Exit Meeting Lessons learned, 'Possible Next Steps' technical and business discussion. Continuing support expectations.

56. Training:

Describe tools used to develop training materials and web-based training.

Describe the format to be used to deliver electronically editable training materials to the NE DMV.

Bidder Response:

A detailed Training Plan will document the training approach, needs analysis, curriculum, delivery schedule, and learning paths for each Release of the Systems Modernization program. The Training Content Development section in the plan also details each type of training documentation, the tools and software used for development, and the file format in which each type of document is provided to the NE DMV. The Training Plan will also describe Celtic's standards and guidelines that will be applied to ensure the development of high-quality training materials and clarifies Celtic and NE DMV responsibilities and accountabilities as they relate to the training development review and approval process. The Training Plan also provides details related to the training environment, course delivery and evaluation, as well as overall training project management information.

The key features of the training approach that will be documented in the Training Plan include the following:

- Training Audience and Needs Analysis: Identifies specific learning needs of all audiences as input to curriculum development.
- **Training Strategy and Plan:** Documents training scope, objectives, approach, and key deliverables. Provides the basis for the training strategy and is primarily built on the Training Needs Assessments.
- **Training Curriculum and Course Overviews:** Role-based training curriculum maps roles to training modules, delivery hours, and methods of instruction.
- **Training Materials Development:** Develop training course material as per the training plan, and curriculum such as materials for instructor-led training, eLearning, business-specific quick reference guides, and exercises will be created.

- Schedule Training Delivery and Logistics: Provides the approach for course training delivery and materials for end-user groups. Includes timing and delivery type as well as administration of course registration and attendees
- **Training Delivery Schedule & Logistics for Classroom training delivery**: Training logistics and schedule (location, number of people per class, duration, etc.). Note: It is anticipated that the NE DMV will provide fully equipped training rooms at their location with secure network access to allow the training delivery.
- **Deliver Training:** Complete delivery of training sessions at the end of the system development between UAT and Go-Live.
- Track, Monitor, and Evaluate learning outcomes: Monitor training effectiveness based on agreed assessment criteria. It is anticipated that the NE DMV will assign staff to administer, collect and tabulate the assessment information.
- Training Materials, Manuals, Video Tutorials, and Web-based training: NE DMV LMS will be utilized for web-based training. If NE DMV LMS is not available, Celtic can use its tested product iLearn for the initial training of the NE DMV Staff in the Train the Trainer model in UAT. iLearn is a web-based product that supports multi-media content with multiple delivery mechanisms, including classroom, video-over-web, and self-learning for training a large audience.
- Celtic will create and provide training videos for a new Driver's License Process and a Driver's License Renewal.
- Celtic has an existing set of training materials that can be modified to suit the needs of NE DMV via a review/ approval process.

The following diagram is a sample of the Celtic iLearn Course Home Page:

	CTS-iLearn		🛐 🎜 📴 Logout
			COURSES
Joe O TRAINEE Celtic Systems HO	West Virginia dmvFIRST	WV IRP New Account	PRIO-OO
de Dashboard	Last Accessed: Jul 19, 2018	Last Accessed: Jun 18, 2018	Last Accessed: May 31, 2018
Courses	Last Lesson. Overview damp, inventory, Overview & inventory	Last Lesson. Socion, west virginia in- new Account priz	Last Lesson, Oro, Load & Dimensions
🗈 Assignment	Continue →	Continue →	Continue -+
Lat Trainee Test Results			
🕿 Certificate	CTS-iLearn Overview	CPR NOT STARTED	CTS-IFTA Fundamentals
TSLEARN™ 9 Copyright 2016. Celfic Systems VI Rights Roserved.	You have not started this course. Please click on Start to visit the course.	You have not started this course. Please click on Start to visit the course.	You have not started this course. Please click on Start to visit the course.
/ersion: 1.0.61318(2018-05-11)	Start →	Start	Start →

#### **CTS-iLearn™ Celtic's Learning Management Tool**

- Expected hours and days on site: We have seen our clients' preferences vary based on their setup. We believe NE DMV has quite a unique setup, with distributed offices, including offices of clerks which may/ will also have users. We believe that NE DMV prefers as much direct-to-user training as possible and virtual for remote locations.
- Celtic will work with NE DMV and come up with an extensive training plan that will include the expected hours and days on site.
- **Train the trainer:** Celtic finds that the Train the Trainer (TTT) model for training delivery is proven to be more efficient and effective with past clients. Celtic will work with NE DMV and come up with an extensive training plan that will include the plan for Train the Trainer.
- Video tutorials and web-based training: Celtic will work with NE DMV to provide training videos and related skills assessment questions and answers to be incorporated into NE DMV's LMS for large-audience training.

# 2. Technical Approach

# c. Technical Considerations

#### 57. Training:

Provide a sample section of a recently developed training manual.

#### **Bidder Response:**

# Below is a sample of the recently developed training manual:

1.3.1 New IRP Account Back to Top | Show All Im The New Account process starts with creating a common customer at the Enterprise Level before creating a new IRP account (Section 1.2.1.1 in the Enterprise User Guide). The customer number and IRP account number are one and the same. Account and Customer are common for an IRP fleet creation. A new IRP account is required when creating a new IRP fleet for the first time. After logging in, expand the Services header on the left column of the screen and select IRP/Intrastate. The IRP/Intrastate main menu screen displays next with various menu options. · From the Account menu tile, click New IRP Account. The New IRP Account Customer Search screen will be displayed next · Enter the account (common customer) number in the Account No. field Click the PROCEED button on the command line o If the common customer record does not exist, the system will display a message indicating no customer exists. The user must go to the Enterprise level, also located under the Services header on the left column of the screen, to create the common customer. o If the carrier already has an existing IRP account, the user must create a new fleet or perform the desired transactions (supplements) in an existing fleet. A message will display to notify the user that an account already exists. o If a carrier already exists as a Common Customer but does not have an IRP account, the New IRP Account Customer Details screen is displayed 1.3.1.1 Add Account The next step is creating the IRP account profile. New IRP Account Customer Details Customer Detail Carrier Type: C - CARRIER Registrant Type: C - CORPORATION IFTA Account No. : Sustomer Status: A - ACTIVE Address Detail **Business Customer Details** Account Detail cords Retention: Account Status: A - ACTIVE Email Notification: Fax Notification: 0 Proceed Refresh Quit ?

#### 6721 Z1 Appendix B (Option 1) MMCIS Modernization

58. Training:

Describe the approach used for an External Customer training program, including but not limited to how the Bidder's proposed training team will support the External Customers during delivery of training.

#### **Bidder Response:**

The transaction workflows in our CMCS system are designed with human-like interactions in mind. The system works as a guide/coach for the user and walks them through the complete transaction, step by step, automatically, without them having to navigate the menus. This intuitive design improves user experience, productivity, and needs for extensive training for users in the system.

Celtic will formulate a plan regarding how the external customers will be trained in the new system in the Training Plan Document. This approach typically takes the form of on-site in-person training and a number of online video modules that cover the basic operations.

59. Knowledge Transfer and Turnover Activities:

Describe the approach for meeting the knowledge transfer requirements as identified in the Scope of Work.

#### **Bidder Response:**

Celtic will conduct a Knowledge Transfer of the CMCS solution to the NE DMV resources after the Go-live to assist them in becoming selfsufficient during the production support phase. Knowledge Transfer is a detailed process of planning, scheduling, imparting, and monitoring of transfer of knowledge and skills from Celtic to the NE DMV team. The goal of knowledge transfer is to provide the NE DMV team with the knowledge and skills of the new system to ensure the NE DMV team can assume service delivery responsibilities for the new CMCS solution. Knowledge transfer is not end-user training or communication activities. Identified resources must have a baseline set of skills prior to knowledge transfer activities as knowledge transfer does not include training on specific tools (SQL Management Studio, Visual Studio, etc.), performing data corrections, programming, hardware issues, or network issues.

Celtic will follow a structured approach to transitioning the knowledge of application services to the NE DMV team for the maintenance & operations Phase of the Project. The transition process can be typically depicted into phases mentioned in the below figure:



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# **Transition Planning:**

A detailed joint transition planning phase precedes the knowledge transfer Execution phase to baseline the approach, which focuses on developing the detailed topics, activities, schedule, and agreement on documentation requirements and acceptance plan which will be signed off on by NE DMV. Based on the schedule of activities, the SME availabilities are determined and the invitations for the KT sessions and on-the-job hands-on activities are sent out to all the stakeholders.

# **Classroom Training:**

Celtic will provide training to enable the NE DMV team to gain a clear understanding of the daily activities performed by the different team members and provide the necessary support to the NE DMV team in order to take ownership of the activity.

- Celtic will initially provide pointers to various system knowledge artifacts, documentation, and reference materials such as source code, best practices, and standards to the NE DMV team to be able to take over the responsibility of the modernization maintenance activities.
- Celtic will also provide walkthrough sessions and demonstrations to NE DMV to gain an understanding of the changes made to existing systems as part of the release.
- Celtic will organize transition sessions into various groups and modules to deliver related topics based on skills and training needs.

60. Knowledge Transfer and Turnover Activities:

Describe the approach for turnover of the System as identified in the Scope of Work.

# Bidder Response:

In order to transfer pertinent knowledge to the required target team members, NE DMV will identify and provide the list of members assuming different roles and responsibilities.

- NE DMV team members will gain mastery of the activities along with the existing Celtic team members.
- The NE DMV team will have existing system documentation and various functional/technical design documentation and operation manuals to accelerate the process of learning the fine details necessary to perform the required activities and enhance the current system.
- Achieving sufficient current system knowledge and process details, the NE DMV team will start performing activities in parallel to Celtic.
- However, Celtic team members will still provide the primary support and consultation needed to perform business-critical processes for all warranty activities and resolve any issues until the end of warranty support.

Celtic will structure the training workshops for different stakeholder groups to cater to the different knowledge requirements of the different NE DMV teams such as the Functional, Technical, and QA teams.

# **On-the-Job Training (OJT):**

During the On-the-Job Transition phase, the NE DMV Team will gain knowledge and model the activities performed for each specific module and then begin to participate in activities performed by Celtic.

• NE DMV and Celtic will work in parallel, with Celtic providing the support required to assume responsibility for assigned activities. Examples of these activities include the involvement of the NE DMV team in resolving warranty support tasks, analysis/fixing of low-priority warranty defects, deployment of software builds, and Testing activities.

- Celtic team members will still own the primary responsibility for all warranty activities including daily tasks, resolution of defects/issues, and making decisions in this phase.
- However, the items assigned to NE DMV involving OJTs are excluded from Celtic's SLAs.
- At the end of this phase, the NE DMV team will be able to perform all required daily tasks with the help of Celtic.

OJT will be delivered through the following methods:

- Job Shadowing
- Mentoring/Coaching
- Deliverables review process

### Acceptance:

Knowledge Transfer is considered completed upon:

- Completion of all the items identified in the KT Schedule.
- Sign-off by NE DMV Manager & Celtic Manager for completion of knowledge transfer sessions.

61. Knowledge Transfer and Turnover Activities:

Describe the knowledge and skill base of State technical staff necessary for Knowledge Transfer and Turnover of the System for support by the State as outlined in the Scope of Work.

# **Bidder Response:**

Celtic will conduct a knowledge transfer of the CMCS solution to the NE DMV resources after the Go-live to assist them in becoming selfsufficient during the production support phase. Knowledge Transfer is a detailed process of planning, scheduling, imparting, and monitoring of transfer of knowledge and skills from Celtic to the NE DMV team. The goal of knowledge transfer is to provide the NE DMV team with the knowledge and skills of the new system to ensure the NE DMV team can assume service delivery responsibilities for the new CMCS solution. Knowledge transfer is not end-user training or communication activities. Identified resources must have a baseline set of skills prior to knowledge transfer activities, as knowledge transfer does not include training on specific tools (SQL Management Studio, Visual Studio, etc.), performing data corrections, programming, hardware issues, or network issues.

Celtic will follow a structured approach to transitioning the knowledge of application services to the NE DMV team for the maintenance & operations Phase of the Project. The transition process can be typically depicted into phases mentioned in the below figure:



Figure 2 Celtic's Knowledge transfer and transition process

# **Transition Planning:**

A detailed joint transition planning phase precedes the knowledge transfer Execution phase to baseline the approach, which focuses on developing the detailed topics, activities, schedule, and agreement on documentation requirements and acceptance plan, which will be signed-off on by NE DMV. Based on the schedule of activities, the SME availabilities are determined, and the invitations for the KT sessions and on-the-job, hands-on activities are sent out to all the stakeholders.

# **Classroom Training:**

Celtic will provide training to enable the NE DMV team to gain a clear understanding of the daily activities performed by the different team members and provide the necessary support to the NE DMV team to take ownership of the activity.

- Celtic will initially provide pointers to various system knowledge artifacts, documentation, and reference materials such as source code, best practices, and standards to the NE DMV team to be able to take over the responsibility of the modernization maintenance activities.
- Celtic will also provide walkthrough sessions and demonstrations to NE DMV to gain an understanding of the changes made to existing systems as part of the release.

• Celtic will organize transition sessions into various groups and modules to deliver related topics based on skills and training needs.

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- Achieving sufficient current system knowledge and process details, the NE DMV team will start performing activities in parallel to Celtic.
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Celtic will structure the training workshops for different stakeholder groups to cater to the different NE DMV teams' different knowledge requirements, such as the Functional, Technical, and QA teams.

# **On-the-Job Training (OJT):**

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- Celtic team members will still own the primary responsibility for all warranty activities, including daily tasks, resolution of defects/issues, and making decisions in this phase.
- However, the items assigned to NE DMV involving OJTs are excluded from Celtic's SLAs.
- At the end of this phase, the NE DMV team will be able to perform all required daily tasks with the help of Celtic.

OJT will be delivered through the following methods:

- Job Shadowing
- Mentoring/Coaching
- Deliverables review process

# Acceptance:

Knowledge Transfer is considered completed upon:

- Completion of all the items identified in the KT Schedule.
- Sign-off by NE DMV Manager & Celtic Manager for completion of knowledge transfer sessions.

# 62. System Manuals:

Describe the process and tools used for creating and updating a System Operations Manual and System User's Manual over the course of the contract.

# Bidder Response:

Celtic has developed systems operational manual for our existing customers with information required by NE DMV. During the implementation phase, we will update our system operation manual to include NE DMV-specific information.

CMCS COTS products system user manuals include all sections required by NE DMV. During the implementation phase, we will update user manuals to include NE DMV-specific configurations, customizations, business rules, and workflows.

# c. Technical Considerations

# 63. System Manuals:

Provide a sample from a System Operations Manual for one business process recently created.

# Bidder Response:

# Below is a sample screenshot of a system user guide illustrating a business process recently created:

	to Top   Show All Ima
The New Account process starts with creating a common customer at the Enterprise Level before creating a new IRP account (Section 1.2.1.1 in the Enterprise User Guide). The customer number and IRP account number are one and the same. Account and Customer IRP fleet creation.	er are common for any
A new IRP account is required when creating a new IRP fleet for the first time.	
After logging in, expand the Services header on the left column of the screen and select IRP/Intrastate. The IRP/Intrastate main menu screen displays next with various menu options.	
From the Account menu tile, click New IRP Account. The New IRP Account Customer Search screen will be displayed next	
Enter the account (common customer) number in the Account No. field	
Click the PROCEED button on the command line	
<ul> <li>If the common customer record does not exist, the system will display a message indicating no customer exists. The user must go to the Enterprise level, also located under the Services header on the left column of the screen, to create the common cu         o If the carrier already has an existing IRP account, the user must create a new fleet or perform the desired transactions (supplements) in an existing fleet. A message will display to notify the user that an account already exists.</li> <li>If a carrier already exists a Common Customer but does not have an IRP account, the New IRP Account Customer Details screen is displayed</li> </ul>	istomer.
1.3.1.1 Add Account	
The next step is creating the IRP account profile.	
Accessed Rest Distance Objectively Multicle Hilling Payment Controllation Matchings Inspired	
Customer Details New IRP Account	
Customer Details	
Account file: CORPORATION Carrier Type: C: CORPORATION Carrier Type: C: CARRIER Legit Name: HT Account file: CARRIER HT Account file: CARRIER	
DB Name:	
Address Details	
Bryas at Address. Mailing Address	
Street: 🔂 20 ¢504; 🚺 Jur: 💶	
city: County: County: US	
Business Customer Details	
Constat Name: The Second	
LEAD TEAD TEAD TEAD TEAD	
Account Status: A ACTIVE +	
Email Notification: Fax Notification:	

# c. Technical Considerations

# 64. System Manuals:

Provide a sample from a System User's Guide illustrating one transaction recently created.

# Bidder Response:

# Below is a sample screenshot of a system user guide illustrating a transaction recently created:

1.3.1 New IRP Account	Back to Top   Show All J
The New Account process starts with creating a common IRP fleet creation.	:ustomer at the Enterprise Level before creating a new IRP account (Section 1.2.1.1 in the Enterprise User Guide). The customer number and IRP account number are one and the same. Account and Customer are common for
A new IRP account is required when creating a new IRP fl	et for the first time.
After logging in, expand the Services header on the left of	lumn of the screen and select IRP/Intrastate. The IRP/Intrastate main menu screen displays next with various menu options.
<ul> <li>From the Account menu tile, click New IRP Account</li> </ul>	nt. The New IRP Account Customer Search screen will be displayed next
Enter the account (common customer) number in	the Account No. field
<ul> <li>Click the PROCEED button on the command line</li> </ul>	
<ul> <li>If the common customer record does not ex If the carrier already has an existing IRP acc</li> <li>If a carrier already exists as a Common Cust</li> </ul>	ist, the system will display a message indicating no customer exists. The user must go to the Enterprise level, also located under the Services header on the left column of the screen, to create the common customer. Junt, the user must create a new fleet or perform the desired transactions (supplements) in an existing fleet. A message will display to notify the user that an account already exists. Joner but does not have an IRP account, the New IRP Account Customer Details screen is displayed
1.3.1.1 Add Account	
The next step is creating the IRP account profile.	
	Accused Free Basses WigGroup Violatis Billing Prymers Condentiats Machanes Inspire
	Customer Details New IRP Account
	Customer Details
	Account No.: C-COBRORTON Carrie Type: [C-COBRORTON
	Legal Name: Customer Status: A-ACTIVE
	Address Details
	Physial Address Mailing Address
	Street 22 Cool: Juri Coult
	Busines Customer Declaits
	Collect Root Collect C
	Alternate Phone: Fax Ho.:
	Account Details
	Records Retention: 2
	Account Status: A ACTIVE • Testi Hedricator: • Fax Hedricator: •
	Comments 💿
	Prozeed British Qui ?

# 65. System Manuals:

Describe System integrated help functions in the proposed solution.

### Bidder Response:

Celtic provides a fully integrated on-line use guide for all functions of the system. An on-line context-sensitive help functionality is also available on data entry screens. The Frequently Asked Question (FAQ) feature is provided to the users and provides detailed answers and screenshots to help the users through specific scenarios. As and when any changes are made to the system, user manuals and FAQs are updated for the related sections.

Build Book – This document will provide details of tools, technologies, versions, and stepwise installation instructions of CMCS Solution.

# c. Technical Considerations

# 66. System Manuals:

Provide a sample illustrating a System Integrated Help Function in the proposed solution.

# Bidder Response:

Below is a sample screenshot of the system-integrated help function within the CMCS system:

$\langle \circ \rangle$			$\langle \circ \rangle$		
Customer Search					
IRP Account No.	Registrant				
6	(b)	Proceed	efresh Quit	(b)	(b)

#### 1.3.1 New IRP Account

The New Account process starts with creating a common customer at the Enterprise Level before creating a new IRP account (Section 1.2.1.1 in the Enterprise User Guide). The customer number and IRP account number are one and the same. Account and Customer are common for any IRP fleet creation.

A new IRP account is required when creating a new IRP fleet for the first time.

- After logging in, expand the Services header on the left column of the screen and select IRP/Intrastate. The IRP/Intrastate main menu screen displays next with various menu options.
- · From the Account menu tile, click New IRP Account. The New IRP Account Customer Search screen will be displayed next
- Enter the account (common customer) number in the Account No. field
- Click the PROCEED button on the command line
  - o If the common customer record does not exist, the system will display a message indicating no customer exists. The user must go to the Enterprise level, also located under the Services header on the left column of the screen, to create the common customer.
  - o If the carrier already has an existing IRP account, the user must create a new fleet or perform the desired transactions (supplements) in an existing fleet. A message will display to notify the user that an account already exists.
  - o If a carrier already exists as a Common Customer but does not have an IRP account, the New IRP Account Customer Details screen is displayed

#### 1.3.1.1 Add Account

The next step is creating the IRP account profile.



Back to Top | Show All Ima

# 67. System Manuals:

Describe any other electronic help features which may exist in the proposed solution to support end users.

### Bidder Response:

Celtic provides a fully integrated on-line use guide for all functions of the system. An on-line context-sensitive help functionality is also available on data entry screens. The Frequently Asked Question (FAQ) feature is provided to the users and provides detailed answers and screenshots to help the users through specific scenarios. As and when any changes are made to the system, user manuals and FAQs are updated for the related sections.

# 68. System Manuals:

If using a third-party solution to manage the integrated help, identify the tool and describe the plan to transition the use of this tool to NE DMV resources during the project.

# Bidder Response:

Celtic does not employ any third-party or external resources to manage the integrated help.

# 69. System Manuals:

Describe how you keep the System manuals and integrated help functions in sync through the warranty period.

### Bidder Response:

Celtic synchronizes the updates to the system user guide and other available integrated help functions in coordination with the updates to the production environment. This helps to ensure that the system manuals and integrated help functions comprise information pertinent to the latest implementations within the application on a timely basis.

# 70. System Manuals:

Describe how maintenance of the System manuals and integrated help functions will be turned over to the NE DMV after the warranty period.

# **Bidder Response:**

CMCS provides a fully integrated online user guide for all functions of the system. The online user guide and other available help functions will be updated and delivered in coordination with each system release.

# c. Technical Considerations

# 71. MMCIS Modernization:

Describe how the proposed solution will accomplish a NE DMV enterprise-wide solution.

Bidder Response:

Working with the agency's IT and business groups throughout the program.

One of the first steps in the project will be to meet with the NE DMV project team to validate the requirements, perform a detailed "Fit Gap" analysis and drive out the detailed project plan with all sub-tasks and associated dates. We will derive an understanding of the exact meaning of each requirement, document them, and manage the requirements as the project evolves. A requirements traceability matrix (RTM) will be maintained to create bidirectional traceability among the requirements, project plan, and work products. The RTM will form the baseline for the project scope. Each requirement will be validated in each of the project steps, including Requirements, Design, Construction, Testing, and Implementation. In this way, we will be able to identify any inconsistencies between the project plan, work products, and requirements so that no requirement will fall through the cracks!

After the Requirements Traceability Matrix is finalized, we will work with NE DMV domain experts to go through the integrated COTS solution step by step and screen by screen to document the necessary modifications and configurations to meet the requirements. This document is called the Product Verification Document (PVD). The PVD will provide the design criteria needed for the development team to make the necessary changes to the programs that will result in the NE DMV International Fuel Tax Agreement (IFTA) and International Registration Plan (IRP).

During the RTM and PVD documentation processes, we will be configuring the infrastructure in the hosting environment as required by NE DMV hosted, or an Azure Government Cloud-based hosted environment, including the required hardware and system software, servers, firewalls, internet connectivity, backup/restore capability, disaster recovery capability all in a proposed load balanced and database mirroring set up for redundancy and maximum accessibility to the system. Part of this step is to work with the NE DMV IT experts to document all the required interfaces for access to other system data stores of information as required. During this step, we Page **184** of

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will create the Interface Control Document (ICD), which will define exactly how we will interface with the external systems.

To minimize the effect external interfaces have on the applications when these applications change, we have developed a Universal Interface Controller (UIC). Our UIC acts as an interpreter between external systems and our core CMCS application. When an external system file format changes resulting in a change to how that system interfaces with our applications, the only thing that needs to be changed is the UIC, not the application.

After the PVD is finalized and all changes to the COTS product are approved as documented in the PVD, and the hosting environment is ready, code changes and configuration changes are made in conjunction with unit testing, followed by integration testing, system testing, stress testing, User Acceptance Testing, Training and cutover to production.

Show and Tell: Regular, incremental product releases for the extended team to get comfortable with what's coming.

An integral part of our approach is to deploy a "Sandbox" environment with the COTS application to provide an early user experience with respect to the "Look and Feel" of the solution. As the customization takes place, new deployments will be available, and users will be able to access the Sandbox to see the results of their efforts and feedback. This ensures there are no surprises at the time of implementation and is an excellent way to exercise the system early in the project, helping stabilize the programs and validate the converted data and feedback. We will help develop the skills and knowledge of the user community so they can perform their roles effectively and efficiently. We will manage risks by identifying potential problems before they occur so that risk handling activities may be invoked as needed across the life of the project to mitigate adverse impacts on achieving project goals.

<u>Compliant</u>: Our products are running compliant processes in multiple jurisdictions; it comes Out of The Box!

The Celtic Solution is totally compliant with the IRP & IFTA plans, including Audit features IRP Clearinghouse Modernization, and is fully PRISM compliant. We will work with NE DMV to ensure our customized solution is compliant with NE DMV Administrative Rules and department business rules for motor carrier registrants.

<u>Proven Methodology</u>: Evolved over the years and matured with every installation, our methodology has IRP, IFTA, and Audit specific interventions and tweaks.

We have anticipated the complexities associated with undertaking this project and have already built a skeletal work plan with the

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Page 185 of

associated tasks required to make a smooth transition to the new and exciting CMCS Solution for the NE DMV.

The Celtic Team will follow our proven Agile Methodology, combined with our internal processes and procedures, to complete this project on time and within the budget, as it has been done for 18 jurisdictions. Celtic's development methodology is designed to provide efficient and timely program development while ensuring the highest quality and accuracy.

Our development process has evolved, taking into consideration the best practices of Software Engineering and combining them with the following standard industry business practices:

- Establish Detailed Project Plan Each project activity will be defined using the Microsoft Project tracking tool, and a top-level work breakdown structure (WBS) will provide the baseline for measuring project progress and will be used for project status reporting to show adherence with the schedule clearly.
- Establish Configuration Management for Project Products
- Create and document the Requirement Traceability Matrix (RTM)
- Create the Product Verification Document (PVD) Specifications
- Create and document the technical Interface Control Document (ICD)
- Define the Data Conversion Plan (with multiple trial conversions and data cleanup reports)
- Develop Testing Plans (System, Integration, and User Acceptance)
- Code and Unit Test with Prototype Presentations (using a "Sandbox")
- Perform Integration Testing
- Perform System Testing
- Perform Stress Testing
- Perform Regression Testing as required
- Develop User Manuals, Training Plans, and materials
- Develop detailed Cutover plans
- Deliver Train the Trainer for leads
- Assist with User Acceptance Testing
- Deliver User Training

- Perform Final Conversion run and verification
- Implementation into Production
- Post Implementation Review
- Operations, Maintenance Support, and Enhancements

One area we believe will be able to add value to our proposed project plan is the data conversion from existing database structures to a true "Common Client" database structure between IRP, IFTA, and IFTA Audit. One of the most important steps in converting any database of information is to get to know the data you are converting. Celtic will work closely with NE DMV to ensure the data is as free from inconsistencies as possible. We will run reports to identify inconsistencies in the existing data for NE DMV subject matter experts to review and resolve either by manual intervention or via some automated program correction. Our resources have converted IRP, IFTA, and IFTA Audit databases from State grown VSAM file structures and relational database stores to DB2, SQL Server and Oracle.

Once the Common Client database structures are in place, the new system will make for a much more efficient and effective database management platform.

Celtic resources have successfully converted IRP, IFTA, and IFTA Audit databases for multiple jurisdictions in the past.

# **Goals and Objectives**

Celtic's goals and objectives for the NE DMV System Modernization are to provide NE DMV with an integrated IRP, IFTA, and Audit solution that takes maximum advantage of new technologies to improve customer service and ensure compliance with business processing requirements.

Our COTS browser-based solution is designed by our experienced computer system technicians and architects together with Celtic solution business area experts and with input from real-world Motor Carrier Business Area Experts from multiple jurisdictions over a period of 16 years. Celtic will customize and configure our customer-centric and integrated solution for the State that will meet and exceed NE DMV expectations. Our solution utilizes the latest proven technologies and techniques to include lessons learned from our extensive experience over multiple implementations in the Motor Carrier Services Field. We will employ the most recent and proven platform-independent tools within the constraints of the State to accomplish the maximum benefit to the State.

#### Why Celtic?

Celtic products have been installed and currently running in *18 jurisdictions in North America for over the past 16 years*.

Celtic has deployed Motor Carrier solutions over the past three years with key capabilities to eight (8) jurisdictions. In 2019 we implemented our solution in three jurisdictions: the Ohio Department of Transportation, the Idaho Department of Transportation, and Alberta Transportation (Canada). **All were delivered on time and within budget!** 

Celtic resources have worked with the Motor Carrier/Trucking organizations, and federal organizations, like the FMCSA and the IRP and AAMVA Organizations, for over 25 years. We understand registration, licensing, permitting, and tax return tracking and collection of returns. We understand the need for efficient transaction processing to afford the carriers more time on the job and less time in wait lines trying to get their authority to operate. Today's technology presents an unmatched opportunity to provide carriers with streamlined operations and processes that can minimize their operating costs.

Perhaps the single biggest testament to Celtic's capabilities in the Motor Carrier area comes from the selection of Celtic to provide the hosting and ongoing support and maintenance of the IRP Clearinghouse administered by IRP, Inc. The project was deployed in the year 2012 and went in seamlessly. As you know, the IRP Clearinghouse administers to all the US and Canadian jurisdictions and operates internationally. This gives us the confidence that Celtic has the experience and the technology to meet the NE DMV challenge for a new and efficient system.

# 2. Technical Approach

# c. Technical Considerations

72. System Maintenance:

Provide the terms of the bidder's annual software maintenance.

#### **Bidder Response:**

# Support and Maintenance

As a part of our support and maintenance process, Celtic shall follow a service level agreement (SLA) to provide all necessary ongoing service, support, configurations, system changes, maintenance, issue resolutions, and error corrections.

During the warranty and support and maintenance period, we will utilize our robust browser-based incident tracking system. Incident and enhancement requests including fee changes will be reported via the Incidents Tracking System (CITS). Supporting documents including screenshots can be uploaded with the incident for clarification.

Celtic will on-board sufficient support teams to satisfy the resolution rate for the first call and to handle high call volumes during the system rollout.

Support and Maintenance management requires defining, following, and monitoring at various levels, Level 1 (L1), Level 2 (L2), and Level 3 (L3) support

# Level 1 Support:

The L1 support is through our incident tracking system.

# Level 2 Support:

Celtic will provide dedicated technical support personnel for managing both the business and performance aspects of the contract. Celtic will perform the following activities as part of L2 support:

- Provide a quick First-Level Resolution (FLR)
- Compliance with the response time
- On-time routing of the required incidents
- Resolving common incident types quickly using issue resolution procedures

- Reporting results of root cause analysis to identify stakeholders within defined timeframes for priority incidents
- Prepare status reports and attend a monthly service review meeting

# Level 3 Support:

When no resolution is found at L2 support, the Celtic team and the NE DMV team will work together to resolve issues that may involve the NE DMV network.

CMCS provides a fully integrated on-line use guide for all system functions. An online context-sensitive help functionality is also available on all applicable screens. The Frequently Asked Question (FAQ) feature provides users with detailed answers and screen shots to help users through specific scenarios. As and when any changes are done to the system, user manuals and FAQs are updated for the related sections.

# Software Updates:

Following software changes shall be part of our maintenance services:

- Incident identified as bug in the system,
- Jurisdiction's Fee changes reported through IRP, Inc., and
- IFTA Tax changes

Software changes that are identified as a new feature/requirement or change to the IRP/IFTA plan will be routed through a change control board approval process.

# **Release Management**

Celtic will work with the agency to come up with a matrix that will help determine deployment frequency. The matrix will consider various factors such as the type of fix (hot fix / new features/ product upgrade/ maintenance release), severity, the priority of the defect, or functionality to come up with the release frequency.

Here is a typical matrix. This may vary for NE DMV.

	Severity	Priority	Frequency	Duration
Hot fix	High	High	Immediate	1 Hr.

	Celtic Cross Holdings, Ir	nc., dba Celti	c Systems]	Response	to RFP 6721 Z1 Appendix B	(OPTION 1: Vendor provided conte	nt management system)
- E	J,	,	,				

New Features	Medium	High	Quarterly	4-6 Hrs.
System Upgrade	Medium	Medium	Depends on the Road map	8-24 Hrs.
Maintenance Release	Medium	Medium	Monthly	2 Hrs.

# c. Technical Considerations

# 73. System Maintenance:

Describe the type of software changes which may be made independently by State IT resources after completion of the warranty period (forexample setting up a new alert, a new configuration or modification to existing business rules or changing the amount of an existing fee).

# **Bidder Response:**

Celtic will conduct Knowledge transfer for the CMCS solution to the NE DMV resources after the Go-live to assist them in becoming self-

sufficient during the production support phase.

The technical and system administration activities that shall be managed by State IT and business resources are as follows:

- Create and modify configurations
- Manage user accounts and user roles
- Manage administrative fees, tax rates, and exchange rates
- Administer the business rules
- Develop and modify notifications
- Manage FAQs
- Perform data and knowledge management
- Operate the solution fully upon successful rollout of all functionalities

# 2. Technical Approach

# c. Technical Considerations

74. System Maintenance:

Describe software changes Bidder is responsible for during the maintenance period.

# Bidder Response:

As a part of our support and maintenance process, Celtic shall follow a service level agreement (SLA) to provide all necessary ongoing service, support, configurations, system changes, maintenance, issue resolutions, and error corrections.

During the warranty and support and maintenance period, we will utilize our robust browser-based incident tracking system. Incident and enhancement requests including fee changes will be reported via the Incidents Tracking System (CITS). Supporting documents including screenshots can be uploaded with the incident for clarification.

Celtic support personal will review the incident and confirm its understanding with NE DMV before it moves through the process.

Following software changes shall be part of our maintenance services:

- Incident identified as bug in the system,
- Jurisdiction's Fee changes reported through IRP, Inc., and
- IFTA Tax changes

Software changes that are identified as a new feature/requirements, or change to the IRP/IFTA plan will be routed through a change control board approval process.

# 2. Technical Approach

# c. Technical Considerations

75. System Maintenance:

Describe the expectations for State resources (personnel, office space, etc.) during maintenance and support of System.

#### **Bidder Response:**

NE DMV team shall provide Level 1 support and report any identified incident in our Incident Tracking System for the analysis and feedback from the Celtic Level 2 support team member.

# c. Detailed project work plan

76. Project Management Plan:

Describe the approach for meeting the Project Management requirements as identified in the Scope of Work.

# Bidder Response:

Celtic will leverage Project Management's best practices applicable to the Agile framework. Celtic will onboard a seasoned Project Manager with extensive experience in managing similar projects. The Project Manager will work in collaboration with the NE DMV project manager counterpart from the start of the project through go-live while working with NE DMV in collaboration for tracking and ensuring the quality throughout the project duration and to ensure that the program is delivered on time and within budget. The Project Manager will be supported by the Functional team, Development, and PMO team to ensure the successful execution of the Agile releases.

The below diagram provides a 3-tiered governance view, with stakeholders involved and a focus on outcomes.

What	Who	Cadence	Outcomes
Portfolio Value Stean Strategic Th Epic Discove Budget/Fun	ns • Steering Con Iemes ery Iding	nmittee • Quarterly decisions a needed	or as are • Prioritized epics • Understanding of MVP • Investment decisions
Program Program ba Group of 5 Architecture Simple budg	cklog • Project Mana sprint teams PMO / RTE al runway • Product Man gets • System Archi • SME and Lea	ager and • Program Increment itects ds	<ul> <li>Value Achievement</li> <li>Commitment (Current PI)</li> <li>Alignment</li> <li>Release on demand</li> </ul>
Team • Team backlo • Develop on • Stories, spik refactoring • Traditional s	ogs • Developmen cadence • Scrum maste res, • Product own sprint teams	t team • 2 week sp er Ier	<ul> <li>Working software – value delivered</li> <li>Code quality</li> <li>Continuous release</li> </ul>

The Celtic Project Management framework (based on the Project Management Institute's PMBOK), will be used to plan and execute this program. The framework organizes project management processes into four main phases linked by the results they produce—the result or outcome of one becomes an input to another. It provides for well-defined deliverables, entry and exit criteria, and activity definitions in each of these phases.

The four main phases follow a rigorous structure to plan, execute, control, and close the nine Project Management core processes as depicted in the picture. The Project Management Office (PMO) manages the processes. The four PMO phases are specific to project management and can be applied to any Project Lifecycle model.



A process-centric perspective is provided to the Project Management framework by the nine core processes of Scope, Time, Cost, Quality, Resource, Communication, Risk/Issue, Performance, and Vendor Management.

These core process areas are aligned with the Agile execution framework.

6721 Z1 Appendix B (Option 1) MMCIS Modernization

- Scope Management: Scope Management ensures that the project includes all the work required to complete it successfully.
   Key Scope Management activities include:
  - Prioritize Portfolio backlog
  - Split epics, prioritize features
  - Prioritize Product backlog
  - Prioritize team sprint backlog
- **Time Management:** Time Management ensures the timely delivery and completion of the project. Key time management activities include:
  - Fixed Sprints and Program Increment durations
  - Frequent backlog grooming
  - Prioritize user stories
  - Observed team velocity
  - o User stories sized based on Agile estimation techniques
  - o Team members commit to the sprint backlog
- **Cost Management:** Cost Management ensures that the project is completed within the approved budget. Key cost management activities include:
  - Plan Agile Release Train (ART) Funding
  - Allocation based on customer demand
  - o Determine the Agile Release Train budget
  - Control costs at a Program Increment boundary
- **Quality Management:** Quality Management ensures that the project adheres to the quality standards as planned. Key Quality management activities include:
  - o Definition of ready
  - Behavior-driven development (BDD) / Test-driven development (TDD)
  - Continuous integration
  - Definition of Done / Pair testing
- **Resource Management:** Resource Management ensures the most effective utilization of resources for the project. Key Resource management activities include:

- Evaluate team capacity
- o Dedicated teams assigned
- Retrospectives and continuous learning by teams
- Self-organized teams
- **Communication Management:** Communication Management ensures an ongoing cycle of collecting and disseminating project information. Key Communication management activities include:
  - Setting up a Governance model for the program
    - Identify business owners
    - Align to a common vision
    - Frequent collaboration and team agreements
  - o The daily stand-up meeting, sprint demos, and retrospective meetings
  - Publish work status on Kanban boards
  - Highly collaborative environment; lean portfolio metrics published regularly
- **Risk & Issues Management:** Risk & issues Management ensures the identification, analysis, and resolution of project risks and issues. Key Risk & Issue management activities include:
  - Deliver in small increments; mid Program increment reviews
  - Fishbone and 5 Why techniques to analyze impediments
  - Regular Scrum of Scrum meetings to identify impediments
  - Swarm and proactively resolve impediments
- Integration/Performance Management: The Release Train Engineer (RTE) and the PMO team capture agile metrics at period intervals to track the progress of the agile release train. The metrics are captured at sprint, release, and project levels.
   Representative metrics include:
  - Sprint Velocity
  - Sprint Defect density
  - Release Productivity
  - Release defect density
  - Release effort variance

# Celtic Cross Holdings, Inc., dba Celtic Systems] Response to RFP 6721 Z1 Appendix B (OPTION 1: Vendor provided content management system) O Project Productivity in story points

- Project defect density
- Project schedule variance
- Procurement/Vendor Management: Procurement/Vendor Management ensures the acquisition of services and goods for • successful project completion. Key Procurement management activities include:
  - Establish strategic relationships
  - Develop business partnerships
  - Align with Lean and Agile practices
  - Close contracts

# d. Detailed project work plan

77. Project Management Plan:

Provide an example of a Project Management Plan.

# **Bidder Response:**

Celtic has reviewed the implementation roadmap of NE DMV and agrees with their overall approach. The implementation and data migration timeline of 12 months for the MMCIS can be achieved only by using a CMCS COTS product.

Our Proposed Implementation solution overview is given below:

- A. We will use our proven COTS solution CMCS (Celtic Motor Carrier System) which will provide most functionalities out of the box and require significantly less effort in configuration and customization when compared to a custom development effort.
- B. Our solution will drive operational efficiencies through workflows, configurable rules, and integration with other internal applications.
- C. Easier maintenance of the solution using a modular design approach.
- D. Reduced implementation effort leveraging our prior knowledge and experience in implementing motor carrier solutions in other USA and Canada jurisdictions.
- E. Agile development methodology to build the solution incrementally. The functionalities configured/customized will be available to NE DMV business users earlier to provide quicker feedback.
- F. Implement the solution in 12 months with a single deployment.
- G. The legacy system proposed to be de-commissioned in two months after Go-live.
- H. Use current NE DMV on-premises product licenses to reduce costs
- I. Warranty support of 18 months after Go-live

Given below is an indicative project plan with key milestones. Celtic will work with NE DMV to finalize our detailed project plan:



# Figure 3 Implementation timeline with key milestones

# <<e. Deliverables and due dates>>

Following is our proposed schedule for the deliverables. Celtic will work with the NE DMV project manager to finalize the deliverable schedule:

No.	Deliverable Name	Anticipated Submission/Due Date
1	Project Management Plan (PMP)	April 17, 2023
2	Integrated Master Schedule	May 1, 2023
3	Final Implementation Plan	May 1, 2023
4	Requirements Traceability Verification Matrix	May 1, 2023
5	Solution Security Plan	June 1, 2023
6	COTS System Technical Architecture Design	June 1, 2023
7	Interface Control Document – NE DMV Integration	July 3, 2023
8	Interface Control Document - External Systems	July 3, 2023
9	Product Verification Document for Enterprise System	July 17, 2023
10	Product Verification Document for IFTA & Tax System	July 17, 2023
11	Product Verification Document for IRP System	July 17, 2023
Celtic	Cross Holdings, Inc., dba Celtic Systems] Response to RFP 6721 Z1	Appendix B (OPTION 1: Vendor provided content management system)
--------	-------------------------------------------------------------------	------------------------------------------------------------------
12	Product Verification Document for IRP & IFTA Audit System	July 17, 2023
13	Data Migration and Data Conversion Plan	June 1, 2023
14	Initial Legacy Data Mapping to COTS	June 1, 2023
15	Development Completion Software Milestone	November 1, 2023
16	Configuration Completion Software Milestone	November 1, 2023
17	Final Legacy Data Mapping to COTS	June 23, 2023
18	Security Testing Plan	October 2, 2023
19	Key Performance Measures Criteria Report	December 11, 2023
20	Security Verification	December 11, 2023
21	UAT Completion Report	January 5, 2024
22	Training and Training Materials	January 15, 2024
23	Final System and User Documentation	February 14, 2024
24	Deployment Implementation Plan and Checklist	February 14, 2024
25	Final Solution	March 1, 2024
26	Project Closeout & Lesson Learn	March 25, 2024
27	Operations and Maintenance (O&M) Plan	January 5, 2024
28	Warranty Completion Report	September 1, 2025
29	Knowledge Transfer & Turnover Plan	January 5, 2024
30	Project Closure Report	March 25, 2024

Celtic Cross Holdings, Inc., dba Celtic Systems] Response to RFP 6721 Z1 Appendix B (OPTION 1: Vendor provided content management system)

#### 2. Technical Approach

#### d. Detailed project work plan

78. Project Management Plan:

Describe the approach to risk and issue management specifically describing risks related to this project and mitigation or remediation considerations.

#### **Bidder Response:**

#### **Risk Management**

Risks will be monitored and evaluated on an ongoing basis at the Project Management level to:

- Determine the effectiveness of the mitigation plan
- Determine any needed changes to the status and prioritization of risks and mitigation approach
- Identify and escalate any new risks that arise as the transformation progress

### **Risk Response Control:**

Risk response control involves executing the Project Risk Management process to track and respond to risk events over the course of the project. When changes occur, the basic cycle of identifying, quantifying, and responding to threats is repeated. Any changes to impact or probability are reviewed continuously and the progress of handling the risks is reviewed and tracked to ensure that:

- Actions which should reduce the probability of occurrence are effective
- Actions which should reduce the loss associated with the risk are effective, and when risks for which there is no possible mitigation action have reached a trigger point for the contingency plan, the contingency plan is performed.

## Risk Response Information:

The following information is captured in the Risk Response Information section in the Cadence file:

- Completed Actions: actions completed to mitigate risk
- Planned Future Actions: actions to be executed in the future to mitigate risk
- Risk Status: status of the risk
  - Open: Risk is in Open status

Celtic Cross Holdings, Inc., dba Celtic Systems] Response to RFP 6721 Z1 Appendix B (OPTION 1: Vendor provided content management system)

Closed: This is no more risk and is in closed status

- o Moved to an Issue: This risk has become an issue and has been added to the Issue Log sheet of the Cadence file

## 2. Technical Approach

# d. Detailed project work plan

79. Project Management Plan:

Provide a proposed project schedule for this project including a timeline identifying all major tasks.

#### **Bidder Response:**

Below is the implementation timeline with key milestones:



Following is our proposed schedule for the deliverables. Celtic will work with the NE DMV project manager to finalize the deliverable schedule:

No.	Deliverable Name	Anticipated Submission/Due Date
1	Project Management Plan (PMP)	April 17, 2023
2	Integrated Master Schedule	May 1, 2023
3	Final Implementation Plan	May 1, 2023
4	Requirements Traceability Verification Matrix	May 1, 2023

6721 Z1 Appendix B (Option 1) MMCIS Modernization

Celtic	Cross Holdings, Inc., dba Celtic Systems] Response to RFP 6721 Z1	Appendix B (OPTION 1: Ven	dor provided content management syste
5	Solution Security Plan	June 1, 2023	
6	COTS System Technical Architecture Design	June 1, 2023	
7	Interface Control Document – NE DMV Integration	July 3, 2023	
8	Interface Control Document - External Systems	July 3, 2023	
9	Product Verification Document for Enterprise System	July 17, 2023	
10	Product Verification Document for IFTA & Tax System	July 17, 2023	
11	Product Verification Document for IRP System	July 17, 2023	
12	Product Verification Document for IRP & IFTA Audit System	July 17, 2023	
13	Data Migration and Data Conversion Plan	June 1, 2023	
14	Initial Legacy Data Mapping to COTS	June 1, 2023	
15	Development Completion Software Milestone	November 1, 2023	
16	Configuration Completion Software Milestone	November 1, 2023	
17	Final Legacy Data Mapping to COTS	June 23, 2023	
18	Security Testing Plan	October 2, 2023	
19	Key Performance Measures Criteria Report	December 11, 2023	
20	Security Verification	December 11, 2023	
21	UAT Completion Report	January 5, 2024	
22	Training and Training Materials	January 15, 2024	
23	Final System and User Documentation	February 14, 2024	
24	Deployment Implementation Plan and Checklist	February 14, 2024	
25	Final Solution	March 1, 2024	
26	Project Closeout & Lesson Learn	March 25, 2024	
27	Operations and Maintenance (O&M) Plan	January 5, 2024	
28	Warranty Completion Report	February 28, 2025	
29	Knowledge Transfer & Turnover Plan	January 5, 2024	
30	Project Closure Report	March 25, 2024	

## 2. Technical Approach

## d. Deliverables and Due Dates

### 80. Deliverables

Describe your approach to meet all deliverable requirements and due dates identified in the scope of work.

#### Bidder Response:

Celtic will elicit, document, and manage all requirements and the NE DMV business rules to support the project deliverables. Business Rules will be identified as part of the JAD sessions. The commonly generated requirement document(s) will be signed off by NE DMV for the project deliverable.

We will leverage Project Management's best practices applicable to the Agile framework. Celtic will onboard a seasoned Project Manager with extensive experience in managing similar projects. The Project Manager will work in collaboration with the NE DMV project manager counterpart from the start of the project through go-live while working with NE DMV in collaboration for tracking and ensuring the quality throughout the project duration and to ensure that the program is delivered on time and within budget. The Project Manager will be supported by the Functional team, Development, and PMO team to ensure the successful execution of the Agile releases.

## **Planning Activities and Documents**

CTS-IRP uses a configurable and customizable commercial-off-the-shelf (COTS) platform. This type of architecture enables rapid deployment while minimizing cost and risk. We plan to implement the CMCS solution in a single-phased approach simultaneously using our Agile Methodology.

#### Revised Option 1 Cost Proposal Request for Proposal Number 6721 Z1

#### Bidder: Celtic Cross Holdings, Inc. dba Celtic Systems

There are two avenues to meet the requirements of this RFP. This cost sheet is for **Option 1**. This option is for a solution that includes an MMCIS and a fully integrated document management system. Bidder shall provide their total cost.

Any anticipated or projected cost increases must be included in the cost provided in this sheet. The State of Nebraska is not obligated to accept costs other than those listed in this sheet for the purpose of contract renewals or for any other reason. Renewal periods listed here do not constitute an obligation of the State of Nebraska or any other party for contract renewals.

<u>Conduct Testing Cost Sheet (2nd tab)</u>: Bidder shall complete the Conduct Testing Cost Sheet in addition to the Cost Sheet (1st tab). The Conduct Testing Cost Sheet will provide a detailed cost breakdown for the total cost for each testing type (i.e. Unit Testing, System Testing, Performance Testing). The detailed breakdown will be utilized for establishing the payment schedule. The detailed breakdown provided on the Conduct Testing Cost Sheet shall equal the total cost reported on the Cost Sheet for Segment 2, Conduct Testing, 8 a - i.

Segment 1: Project Planning and Management	1
Segment 1 shall not exceed 30% of the total costs, excluding maintenance costs.	7
1. Proposal and RFP Review Meeting	7
2. Project Kick Off Meetings	7
Payment Point (1 - 2)	\$ 273,600.00
3. Project Management Plan (including sub-plans)	7
a. Scope and Change Management	7
b. Master Project Schedule and Schedule Management	7
c. Resource Management Plan	7
d. Communications Management	
e. Risk and Issue Management	
f. Meeting Management	
Payment Point (3, a - f)	\$ 171,000.00
4. Status Meeting and Reports	1
a. Weekly Core MMCIS Team Status Meetings	1
b. Weekly MMCIS Project Team Meetings	
c. Monthly Executive Support Team Meetings	
d. Bi-Weekly Written Status Reports	
e. Project Tracking	
No Payment Available (4, a - e)	No Payment Available
5 Initial Problem Escalation Procedure (PEP)	-

5. Initial Problem Escalation Procedure (PEP)	
No Payment Available (5)	No Payment Available

6. System Implementation/Performance Project Planning and Management Plans	
a. Data Plan (Data Cleanup, Migration and Conversion)	
b. Design and Technical Architecture Document	
c. Interface Plan	
Payment Point (6, a - c)	\$ 102,600.00
d. Testing Plans	
i. Unit and System Test Plan	
ii. User Acceptance Test Plan	
iii. Performance Test Plan	
iv. Vulnerability Test Plan	
v. Regression Test Plan	
vi. Compatibility Test Plan	
Payment Point (6, d, i - vi)	\$ 102,600.00
e. Release Plan	
f. Training Plan	
g. Knowledge Transfer and Turnover Plan	
Payment Point (6, e - g)	\$ 34,200.00

Segment 2: Perform Implementation		
Segment 2 shall not exceed 60% of the total costs, excluding maintenance costs.		
1. Conduct Gap Analysis		
2. Develop and Present Gap Analysis Report		
Payment Point (1 - 2)	\$	273,600.00
	Ŧ	_/0,00010

3. Data Cleanup, Conversion and Migration	
a. Complete Activities	
b. Develop and Present Report	
Payment Point (3, a - b)	\$ 273,600.00

4. Initial Update of Appendix A, MCIS Modernization Requirement Traceability Matrix	
5. Build Modernized Motor Carrier Information System ( <b>Option 1 Specific Requirement:</b> To include a	
fully integrated document management system)	
6. Build Interfaces	
7. Build System Integrated Help Function	
No Payment Available (4 - 7)	No Payment Available

8. Conduct Testing Payment Points (8, a - i)	
a. Complete Unit Testing	\$ 30,780.00
b. Complete System Testing	\$ 30,780.00
c. Complete User Acceptance Testing	\$ 30,780.00
d. Complete Performance Testing	\$ 10,260.00
e. Complete Vulnerability Testing	\$ 10,260.00
f. Complete Data Conversion Testing	\$ 30,780.00
g. Complete Regression Testing	\$ 20,520.00
h. Complete System Compatibility Testing	\$ 20,520.00
i. Complete Compatibility Testing	\$ 20,520.00

	_	
9.Test Approach	_	
a. Perform Integrated Performance Tests in an Environment Identical to Production	_	
b. Resolve Defects		
c. Document and Report Test Results		
No Payment Available (9, a - c)	No Pay	ment Available
10. Testing Requirements – Tools and Systems	7	
a. Establish Multiple Testing Environments		
b. Defect Tracking System		
No Payment Available (10, a - b)	No Pay	/ment Available
11. Complete MCIS Modernization Requirement Traceability Matrix	٦	
Payment Point (11)	\$	205,200.00
12. Conduct Training	٦	
a. Establish Training Environments	-	
b. End User Training Program	_	
c. Deliver Training Documents	_	
Payment Point (12, a - c)	\$	68,400.00
13 Conduct Knowledge Transfer and Turnover Activities	٦	
No Payment Available (13)	No Pay	ment Available
	-	
14. Deployment of System	_	
a. Moderized Motor Carrier Information System (Option 1 Specific Requirement: To		
include a fully integrated document management system)	<u> </u>	
Payment Point (14, a)	Ş	136,800.00
b. Advanced Services (Staggered IRP Registration)		
Payment Point (14, b)	\$	68,400.00
15. Deliver System Documentation	٦	
a. Systems Operation Manual		
b. Systems User Manuals		
Payment Point (15, a - b)	\$	68,400.00
16. Project Close Out	٦	
a. Meeting	1	
b. Project Close Out Report	1	
Payment Point (16, a - b)	\$	68,400.00

Segment 3: Warranty, Maintenance, and Service Level Agreement	1	
1. Warranty Services		
Payment Point (1)	\$	440,500.00

Year 3 of contract renewal period

2. Maintenance Services (Payable monthly)	Annual Cost
Year 1 of contract period, not applicable.	No Payment Available
Year 2 of contract period, not applicable.	No Payment Available
Year 3 of contract period, if applicable.	\$212,500.00
Year 4 of contract period	\$425,000.00
Year 5 of contract period	\$425,000.00
Year 6 of contract period	\$425,000.00
Year 7 of contract period	\$425,000.00

3. Escalation Procedures for Unmet SLAs (Contact Information)	
No Payment Available (3)	No Payment Available

Total Project Cost	\$ 4,405,000.00
No Payment Available (4)	No Payment Available
c. Annual Service Level Agreement Report	
b. Monthly Service Level Agreement Status Report	
a. Performance Metric Tool	
4. SLA Monitoring and Reporting	

OPTIONAL RENEWAL PERIODS		
Renewal One Maintenance Services (Payable Monthly)	Annual Cost	
Year 1 of contract renewal period	\$433,500.00	
Year 2 of contract renewal period	\$442,170.00	
Year 3 of contract renewal period	\$451,013.00	
Year 4 of contract renewal period	\$460,033.00	
Year 5 of contract renewal period	\$469,234.00	
Renewal Two Maintenance Services (Payable Monthly)	Annual Cost	
Year 1 of contract renewal period	\$478,619.00	
Year 2 of contract renewal period	\$488,191.00	

Complete 2nd Worksheet - Option 1 Conduct Testing Cost Sheet

\$497,955.00

#### Revised Option 1 Cost Proposal Conduct Testing Cost Sheet Request for Proposal Number 6721 Z1

#### Bidder: Celtic Cross Holdings, Inc. dba Celtic Systems

Conduct Testing Cost Sheet (2nd tab): Bidder shall complete the Conduct Testing Cost Sheet in addition to the Cost Sheet (1st tab). The Conduct Testing Cost Sheet will provide a detailed cost breakdown for the total cost for each testing type (ex. Unit Testing, System Testing, Performance Testing). The detailed breakdown will be utilized for establishing the payment schedule. The detailed breakdown provided on the Conduct Testing Cost Sheet shall equal the total cost reported on the Cost Sheet for Segment 2, Conduct Testing, 8 a-i.

Testing Types which detailed costs will need to be provided for: Unit Testing, System Testing, User Acceptance Testing, Performance Testing, Integration Testing, Vulnerability Testing, Data Conversion Testing, Regression Testing, System Compatibility Testing, and Compatibility Testing.

Testing Type	Deliverable	Total Cost
Unit Testing	Sandbox Deployment	\$ 30,780.00
System Testing	System Test Result	\$ 30,780.00
User Acceptance Testing	UAT Test Report	\$ 30,780.00
Performance Testing	Performance Test Report	\$ 10,260.00
Vulnerability Testing	Vulnerability Test Report	\$ 10,260.00
Data Conversion Testing	Data Conversion Test Report (completeness / Correctness)	\$ 30,780.00
Regression Testing	Regression Test Report	\$ 20,520.00
System Compatibility Testing	System Compatibility Test Report	\$ 20,520.00
Compatibility Testing	Compatibility Test Report	\$ 20,520.00
	1	

# Form D Project Rates

#### Request for Proposal Number 6721 Z1

Bidder Name: Celtic Cross Holdings, Inc. dba Celtic Systems

Please see Change Management as identified in Section V. Project Description and Scope of Work, D. Change Management, of the RFP. These rates will only be used in the context of that section.

This RFP is for services that are dynamic in nature. As such, there will be natural project dynamics built into the process as well as outside change management that will need to be addressed.

There may arise from time to time a need for work not originally delineated in this RFP but considered within the scope of work as it relates to the modernization of the Nebraska Department of Motor Vehicles Modernized Motor Carrier Information System (MMCIS). This additional work may stem from legislative mandates and/or emerging technologies not otherwise addressed in Section.

V. C. Scope of Work in this RFP or known at the time this RFP was issued.

Prices quoted shall remain fixed for the entire contract period including renewal periods.

Job Title and/or Service	Unit of Measure (Hourly, unit, placement, etc.)	Rate
Project Manager	Hourly	\$125.00
Subject Matter Expert / Functional Lead	Hourly	\$125.00
Lead Developer	Hourly	\$125.00
Lead Tester	Hourly	\$125.00
Lead Trainer	Hourly	\$125.00
Database Expert	Hourly	\$125.00
Solution Architect	Hourly	\$125.00