

REQUEST FOR PROPOSALS (RFP) NO. 18-31-094-00

6C TRANSPONDERS AND HAND HELD READERS

IMPORTANT RFP DATES

| RFP ISSUED | April 5, 2018 |
|-------------------------------------|----------------|
| PRE-PROPOSAL CONFERENCE | April 19, 2018 |
| REQUESTS FOR CLARIFICATION DEADLINE | April 23, 2018 |
| PROPOSAL DEADLINE | May 10, 2018 |
| AWARD DATE | July 25, 2018 |

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1.0 INTRODUCTION AND BACKGROUND

1.1 Background

The Riverside County Transportation Commission (hereinafter referred to as "Commission" or "RCTC") was created pursuant to California state law, and is responsible for: 1) coordinating state highway planning; 2) adopting regional Short Range Transit Plans; 3) coordinating transit services; 4) allocating Transportation Development Act (TDA) funds; 5) coordinating county highway and transit plans with regional and state agencies; and 6) operating tolled Express Lanes.

RCTC operates the 91 Express Lanes in Riverside County. The 91 Express Lanes are jointly operated with Orange County Transportation Authority (OCTA) by a single operator under contract with both agencies. RCTC's portion of the 91 Express Lanes is from the Orange/Riverside County Line to the I-15. In 2020, RCTC anticipates the opening of the 15 Express Lanes which will align from Cajalco to State Route 60. Additionally, RCTC operates a direct connector as a part of the 91 Express Lanes to the I-15 South and anticipates adding a connector between the 91 Express Lanes and I-15 to the north. Transponder projections are included in Appendix I.

1.2 Project Description

The Commission is seeking proposals for 6C transponders and hand-held readers. The objective of this solicitation is to establish a best value bench of contracted firms for the purchase of 6C transponders and hand-held readers. RCTC may purchase:

- Interior mounted sticker:
- Interior mounted breakable sticker;
- Exterior mounted sticker;
- Interior mounted 2-position switchable;
- Interior mounted 3-position switchable; and
- Hand held readers to read 6C transponders.

Contractors may propose on all the transponder types, a subset thereof, or a single transponder type. Contractors who propose on more than one type of transponder should consolidate their proposal responses in their response to Tab 2 (d), noted in Section 7.1.3 of this RFP. Contractor must provide details for each transponder type as described in Tab 2 (e), noted in Section 7.1.3 of this RFP. Proposals for each transponder type included in this procurement will be evaluated and scored on its own merits.

The Commission intends to enter into on call contracts with the selected bench of Contractors, and to award its need pursuant to issuance of purchase orders. The Commission shall rank the Contractors for each category of transponders solicited, and will award purchase orders, as needed, to the highest ranked Contractor in the required category, unless the highest ranked Contractor is not able to meet the Commission's needs for a particular procurement based on specified factors such as schedule and technical requirements, as further detailed in the Model Contract.

The Commission seeks a competitive solution to meet the requirements described in the Scope of Services and the Model Contract, and is hereby issuing this Request for Proposals (RFP) No. 18-31-094-00 to solicit proposals from qualified Proposers. The Commission may issue purchase orders on behalf of itself and/or on behalf of OCTA, as part of the joint 91 Express Lanes operations.

2.0 GENERAL INFORMATION

2.1 Definitions

Proposer: Party or parties submitting a proposal in response to the subject Request for Proposals, hereinafter also referred to as "Proposer" or "Contractor".

3.0 INSTRUCTIONS TO PROPOSERS

3.1 Pre-Contractual Expenses

The Commission shall not be liable for any pre-contractual expenses, which are defined as expenses incurred by a Proposer(s) in preparing its proposal in response to this RFP, negotiating with the Commission any matter related to the proposal, or any other expenses incurred by Proposer(s) prior to the date of award of the contract(s) resulting from this procurement.

3.2 Contract Type; Purchase Order Process

The Commission intends to award on-call fixed unit price contract(s) based upon the prices proposed by the Contractor under the attached Proposal Pricing Form (Appendix H). The Commission intends to award up to three contracts to a bench of the top ranked Proposers for each transponder type, in accordance with Section 8 Evaluation of Proposals included in this RFP. Transponder procurements under the awarded contracts will be made on an on as-needed, on call basis pursuant to purchase orders. Purchase orders, if issued, will be awarded to the highest ranked Contractor in the category of transponder required, unless the highest ranked Contractor is unable to meet Commission's schedule or technical requirements for a particular procurement, as further detailed in the Model Contract. In such case, the Commission will award the purchase order to the next highest ranked Contractor for that category of transponder.

To initiate the purchase order process, the Commission will issue a purchase order setting forth the transponder type, quantity for the order, delivery times and pricing. Delivery time and pricing shall be in accordance with the Contractor's proposal. Contractor must acknowledge, in writing, receipt of and accept the terms of the purchase order within three (3) business days, otherwise the purchase order shall be void.

The award resulting from this RFP shall be available for use by other California toll operators which may order FasTrak 6C transponders on the same terms and conditions included in the contracts resulting from this RFP. The other agencies may provide their own artwork to be printed on the transponders and the transponders will require programming with their unique Agency ID.

3.3 Period of Performance; Initial Order

The contract term or period of performance shall be for a three-year base period with two two-year options to extend the agreement for a total period of performance of up to seven (7) years. The option terms may be exercised by the Commission, at its sole discretion, with prior written notice to the Contractor.

The Commission's initial order for each transponder type, if authorized pursuant to a purchase order, shall be delivered by October 1, 2018 ("Initial Order"). The Initial Order quantities and requirements are as set forth in Appendix H. Contractor represents and warrants that it can meet the delivery time and schedule requirements for the Initial Order.

3.4 Informed Proposer

Proposers shall review the Model Contract (Appendix B) for a complete understanding of all terms and conditions included therein. Proposers are expected to be fully aware of the conditions, requirements, and specifications before submitting proposals. Failure to do so will be at proposer's own risk and proposer cannot secure relief on the plea of error.

3.5 Proposer Representations

By submitting a proposal, each proposer represents that it:

- 3.5.1 Has thoroughly examined and become familiar with the work described in the Scope of Services (Appendix 'A').
- 3.5.2 Understands the requirements of the Scope of Services, the nature and location of the work, and all other matters that can affect the work.
- 3.5.3 Has reviewed the Initial Order requirements described in 3.3 above, and can meet these requirements if issued a purchase order.
- 3.5.4 Will honor its proposal for 120 days, and acknowledges that the proposal cannot be withdrawn within that time and without prior written consent from the Commission.
- 3.5.5 Will comply with all requirements set forth in this RFP and in the ensuing contract, if awarded.
- 3.5.6 Has reviewed the attached Model Contract (Appendix 'B') and, other than through the request for clarification process described below in Section 3.7, will not seek to alter or revise its terms and conditions.
- 3.5.7 Will, if selected to provide transponders or handheld readers, comply with all terms and conditions set forth in the contract associated with this procurement (Appendix 'B').

3.5.8 Will comply with:

- The Fair Employment and Housing Act, relating to non-discrimination, (California Government Code Sections 12900 et seq.).
- Statutory requirements relating to "Whistleblower" requirements (California Labor Code Sections 1101 et seq.).
- Statutory requirements relating to employment of undocumented aliens (California Public Contract Code, Section 6101).
- Statutory requirements related to "prevailing wage" requirements, if applicable (California Labor Code, Sections 1720 et seq.).

3.6 Addenda

The Commission reserves the right to revise or amend the RFP documents prior to the stated proposal submittal deadline. Any such revisions will be made by written addenda to this RFP. Such addenda will be posted on the Commission's website. Since such posting of addenda on the Commission's website is considered constructive notice of the document change, potential proposers are encouraged to check the Commission's website routinely for relevant postings. Firms must acknowledge receipt of addenda in their proposal letters. Failure to acknowledge receipt of all addenda may render the proposal non-responsive.

3.7 Requests for Clarification

3.7.1 Submitting Requests

All requests for clarifications, changes, exceptions or deviations to the Scope of Services or terms and conditions set forth in this RFP must be submitted in writing, utilizing the Request for Clarification Form, Appendix 'E', via email to jmendoza@rctc.org or via regular mail to the Commission's offices listed below, Section 5.2.

All such requests should reference the subject RFP number and title, and must be received by the Commission prior to 2:00 p.m. on April 23, 2018.

3.7.2 Commission Response

The Commission will respond to all written questions within a reasonable time. If a change to the RFP documents is required, a written addendum will be issued. Responses to written questions and addenda will be posted on the Commission's website and PlanetBids. Therefore, all potential proposers to this subject RFP are encouraged to check the Commission's website and PlanetBids frequently. The Commission will not accept any requests for consideration of deviations, exceptions, changes or clarifications after the time and date specified above.

3.7.3 Exceptions or Clarifications to Model Contract

Proposers shall familiarize themselves with the Model Contract (Appendix 'B'). The Commission intends to use the attached Model Contract as the contract(s) resulting from this RFP. Should the Proposer have concerns, questions, or recommended changes to the Model Contract requirements, those concerns/recommended changes must be specified in detail and submitted in

writing to the Commission as set forth in paragraph 3.7.1. The Commission will review Proposer's concerns/recommendations and may post on the Commission's website Proposer's request and any comments from the Commission regarding the potential for consideration of such recommended change(s) during formal negotiations with the successful Proposer. Changes to the Commission's Model Contract shall be made at the Commission's sole and absolute discretion.

3.8 Withdrawal of Proposal

The Proposer may withdraw its proposal before the opening of proposals by submitting a written request signed by an authorized representative of the firm and delivered to the Commission's Procurement Manager.

3.9 Commission Rights

The Commission may investigate the qualifications of any Proposer under consideration, require confirmation of information furnished by the Proposer, and require additional evidence of qualifications to perform the work described in this RFP. This RFP does not commit the Commission to issue a contract to implement this procurement, nor to issue any purchase orders under any contracts awarded pursuant to this procurement.

Furthermore, the Commission reserves the right to:

- 3.9.1 Accept or reject any and all proposals, or any item or part thereof, at its discretion.
- 3.9.2 Make an award for a portion of the Scope of Services.
- 3.9.3 Award contracts to one or more Contractor(s).
- 3.9.4 Cancel or withdraw the entire RFP, or any part thereof, at any time without prior notice.
- 3.9.5 Issue a subsequent or concurrent RFP.
- 3.9.6 Waive any minor errors or irregularities in any proposal, to the extent permitted by law.
- 3.9.7 Obtain information from any source that has the potential to improve the understanding and evaluation of the RFP.
- 3.9.8 Postpone RFP openings for its own convenience.
- 3.9.9 Remedy or overlook technical errors in the RFP process.
- 3.9.10 Appoint an evaluation committee to review RFPs.
- 3.9.11 Seek the assistance of outside technical experts.
- 3.9.12 Approve or disapprove the use of particular subcontractors.
- 3.9.13 Negotiate with any, all, or none of the respondents to the RFP.
- 3.9.14 Accept other than the lowest monetary offer.
- 3.9.15 Award a contract based upon initial offers.

3.10 The selected Proposer(s) are required to comply with all relevant local, state, and federal laws, codes and ordinances. If Proposer outsources any work or job to a sub-proposer, it will be the prime Proposer's responsibility to ensure that all sub-proposers meet the requirements set forth in this RFP and the resultant contract.

3.11 Public Records Act

- 3.11.1 All records, documents, drawings, plans, specifications and other materials submitted by Contractor(s) in its proposal and during the course of any work awarded shall become the exclusive property of the Commission and may be deemed public records and subject to the provisions of the California Public Records Act (Government Code, sections 6250 et seq.). The Commission's use and disclosure of its records are governed by this act.
- 3.11.2 The Commission will accept information clearly labeled "TRADE \SECRET,""CONFIDENTIAL," or "PROPRIETARY" as determined by the submitting party in accordance with the act. The Commission will endeavor to inform the submitter of any request for the disclosure of such information. Under no circumstances, however, will the Commission be responsible or liable to the submitter or any other party for the disclosure of any such labeled information. Firms that indiscriminately identify all or most of their proposal as exempt from disclosure without justification may, at the Commission's discretion, be deemed non-responsive.
- 3.11.3 The Commission will not advise as to the nature or content of documents entitled to protection from disclosure under the California Public Records Act, including interpretations of the act or the definitions of "Trade Secret," "Confidential," or "Proprietary."
- 3.11.4 If the Commission receives a Public Records Act request for a proposal, prior to withholding any information, Contractor shall be required to execute an express agreement, in a form provided by the Commission, to indemnify, defend and hold harmless the Commission in any action to compel disclosure of any withheld material. If the Contractor refuses to sign such an agreement, the Commission shall have the right to disclose the entirety of the proposal, regardless of any marking or labeling of material as trade secret, confidential or proprietary. By submitting a proposal, the Contractor expressly waives any claims against the Commission for such disclosure in the absence of an express written indemnification agreement. The Contractor shall provide to the Commission a specific legal basis for each portion of a proposal sought to be withheld from disclosure.

3.12 Protest Procedures

The Commission has on file a set of written protest procedures applicable to the solicitation. They may be obtained by contacting the designated Procurement Officer by email at jmendoza@rctc.org. Any protest filed by a firm in connection with this RFP must be submitted in accordance with the Commission's written procedures.

3.13 Prohibited Prior Work

Any person or entity that has substantially assisted the Commission, or a contractor duly engaged by the Commission in preparing any aspect of the RFP or any cost estimate associated with this procurement, is prohibited from submitting a proposal in response to this RFP. Contractors that received assistance from any such person or entity, or who will use the services of such person or entity in performing the services will be disqualified.

3.14 Prohibited Communications

No Proposer, or anyone representing a proposer, is to discuss this RFP with any official or employee of the Commission, other than the Procurement Officer named in this RFP. Neither Proposers, nor anyone representing a Proposer, is to discuss this RFP with any Contractor engaged by the Commission for assistance in preparing the RFP documents or any cost estimate associated with this procurement. Violation of this prohibition may result in disqualification of the Contractor even if the contract has already been awarded.

3.15 Use of Subcontractors

- 3.15.1 The Proposer awarded a contract by the Commission must be the prime contractor performing the primary functions of the contract. If any portion of the contract is to be subcontracted, it must be clearly set forth in the proposal document as to what part(s) are to be subcontracted, the reasons for the subcontracting, and a listing of subcontractors. Acceptance or rejection of a Proposer's request to use subcontractors is at the sole discretion of the Commission. The Commission reserves the right to reject any proposal to function as the prime Contractor on the awarded contract. When approved, the subcontractor(s) shall agree to and be bound by all terms, conditions and specifications of the awarded contract and the Proposer shall be responsible for proper performance of the contract by its subcontractor(s).
- 3.15.2 The provisions of resultant agreement shall apply to all subcontractors in the same manner as to the prime Contractor. In particular, the Commission will not pay, even indirectly, the fees and expenses of a subcontractor that does not conform to the limitations and documentation requirements of resultant agreement.
- 3.15.3 Upon written request from the Commission, the Contractor shall supply the Commission with subcontractor agreements.

4.0 INSURANCE REQUIREMENTS

All Contractors doing business with the Commission are required to obtain appropriate insurance coverage within the prescribed minimum limits set forth in the attached Model Contract (Appendix 'B'). The required insurance certificates must comply with all requirements of the standards as shown in the contract and must be provided within ten (10) days of issuance of the Notice of Award and prior to the commencement of any work under the terms of the contract.

5.0 PROCUREMENT SCHEDULE

5.1 Request for Clarification(s)

Deadline for requests for clarification, pursuant to paragraph 3.7 above, is April 23, 2018.

5.2 Pre-Proposal Conference

A pre-proposal conference will be held on Thursday, April 19, 2018 at 1:00 p.m. at the Commission Office located at 4080 Lemon Street, 3rd Floor, Conference Room A, Riverside, CA 92501. Potential Proposers may also attend via conference call. The conference call number and passcode are as follows:

Primary dial-in: (877) 336-1828 Alternate dial-in: (404) 443-6396

Passcode: 5296248

The conference is not mandatory; however, potential Proposers are strongly encouraged to attend.

- 5.3 Proposal Deadline Date
 - 5.3.1 The Commission will accept proposals submitted by hand delivery or express mail courier to the Commission office prior to <u>May 10</u>, <u>2018 at 2:00 p.m</u>. Proposals must be addressed to the following:

Riverside County Transportation Commission Attention: Jose Mendoza, Procurement Analyst 4080 Lemon Street, 3rd Floor Riverside, CA 92501

- 5.3.2 Proposals received after the specified date and time may be considered non-responsive and returned to senders unopened.
- 5.4 Contract Award
 - 5.4.1 Tentative Contract award date is July 11, 2018. If necessary, please contact the Procurement Officer for further detail or updates regarding this process.

- 5.4.2 At its sole discretion, the Commission may notify Proposers of award recommendation information by mail, e-mail or fax. Failure to so notify any Proposer shall not impact, alter or invalidate the Commission's action.
- 5.4.3 Within ten (10) calendar days after the notice of award, the successful Contractor(s) shall enter a formal contract using the Commission's Model Contract, which is attached hereto as Appendix B.
- 5.4.4 In the event the Contractor to whom an award is made fails or refuses to execute the Contract and provide required documents within ten (10) calendar days after notification of the award or receipt of the Contract, whichever is later, the Commission may withdraw the award to that Contractor.

6.0 MODIFICATIONS AND ALTERNATIVE PROPOSALS

Proposer shall submit a proposal in strict conformity with the requirements of the RFP Documents. The proposal shall be complete in itself and shall be submitted in accordance with Section 7.0 "SUBMITTAL REQUIREMENTS" instruction below.

Unauthorized conditions, limitations, or provisions attached to a proposal may render it invalid and cause its rejection. Alternative proposals will not be considered unless specifically requested. Oral, telegraphic, or telephonic proposals or modifications will not be considered.

7.0 SUBMITTAL REQUIREMENTS

Each proposal submitted in response to the RFP must include the following information in the order specified below. It is highly recommended that responses be professionally presented, well-organized and to the greatest extent possible, concise.

7.1 Proposal Content and Format

Please utilize the boxes below ("\[\sigma" \]) as a checklist to ensure a complete response to the RFP.

7.1.1 Proposals shall be typed and submitted on 8½" x 11" paper, spiral or comb-bound. Charts and schedules may be included in 11" x 17" format, which will be counted as 2 pages and included in the total page count. Proposals should not exceed ten (10) pages in length for single transponder proposal or twenty five (25) in length if Contractor is proposing on multiple transponders, excluding any RCTC provided forms or attachments. Narrative should be brief, concise and completely respond to the questions or issues raised by the published evaluation criteria.

 Termination of a contract for convenience or for cause. (c) Project Reference Form (Appendix 'G') Complete, sign and submit Project Reference Form, Appendix 'G'. Provide at least two (2) references, which demonstrate past and present performance providing 6C transponders. Each reference shall include the information required in Appendix G. Incomplete forms may be considered non-responsive. (d) Describe your approach to performing the work described in the scope of services: ١. Describe your approach to failure analysis during manufacturing and after delivery to individual motorists. Provide a copy of your quality control plan including your II. approach to maintaining compliance with the Omni Air certification and failure rate as described in the Contract. Describe your process for coordinating the transponder III. artwork design and application of the artwork to the transponder. IV. Describe your inventory control processes, including onsite storage capacity. ٧. Describe your return to manufacturer process, including the replacement of failed transponders. VI. Describe your approach to delivering the hand held reader (if proposing to provide). VII. Confirm your ability to meet the Commission's requirements for the Initial Order (as defined in Section 3.3 of the RFP) if issued a purchase order therefor. (e) Respond to items I-IV by transponder type in the following order: Interior mounted sticker; Interior mounted breakable sticker: Exterior mounted sticker; Interior mounted 2-position switchable; and Interior mounted 3-position switchable. Describe your approach to meeting the California 6C Electronic Toll Collection Standards provided in Appendix II. Provide the status of Omni Air certification.

Discuss minimum and maximum production runs and delivery time from the time of order. Include your approach

to meeting shipping deadlines.

III.

| TAB 3 | - PHYSICAL TRANSPONDER ATTRIBUTES |
|----------------|---|
| | Provide five (5) samples of each transponder type the Proposer is proposing to furnish. |
| | Provide the dimensions, shape, artwork size and placement weight, switch design and functionality (as appropriate) by transponder type. Provide the due date for final artwork (as appropriate) from the time of contract award. |
| | Provide details as to the material to be used and its physica appearance and durability. |
| | Provide the source and specifications regarding the mounting solution to be used. |
| | Provide any special requirements for mailing the individual transponders to the customers via first class mail. Include information regarding special protection that is needed to prevent damage to the transponder. |
| | Provide information regarding the packaging and presence of the barcode with regard to ease of use while performing day to day inventory and order fulfillment work. |
| TAB 4 | - PROPOSAL PRICING FORM |
| | <u>Proposal Pricing Form</u> (Appendix 'H'). Complete the Proposal Pricing Form included herein as Appendix 'H'. As Appropriate include any pricing for optional enhancements/betterments of each type of transponder. |
| TAB 5 | - REQUIRED FORMS |
| forms docum | equired submittal forms must be included with the proposal. The shall be prepared using the copies provided with the RFP ents, or on legible photocopies. Proposals that are partial plete or modified in form or substance from what is requested in the |

forms shall be prepared using the copies provided with the RFP documents, or on legible photocopies. Proposals that are partial, incomplete or modified in form or substance from what is requested in the forms may be considered non-responsive. Proposers shall initial all interlineations and revisions to entries. Failure to do so may render the proposal incomplete and non-responsive.

Proposers' authorized signatory must review, complete, sign and submit the following forms with its proposal:

Appendix C – CAMPAIGN CONTRIBUTION CERTIFICATION

Appendix D – PROPOSAL LETTER

Appendix G – PROJECT REFERENCE FORM

Appendix F – CONTRACTOR INFORMATION FORM

Appendix H – PROPOSAL PRICING FORM

8.0 EVALUATION OF PROPOSALS

8.1 Basis of Award

8.1.1 If awarded, a contract will be entered into with the Contractor(s) selected through the evaluation process. Any proposal submitted in response to this RFP will be evaluated in strict accordance with the stated evaluation criteria. The Commission reserves the right to award the contract not necessarily to a Proposer with the lowest cost proposal, but to Proposers who will provide the best overall match to the RFP requirements and who best serve the Commission's interests.

8.2 Minimum Qualifications

- 8.2.1 The Contractor must be a responsive Proposer that has been in continuous existence and has provided continuous services for the relevant requirements contained herein for at least three (3) years. Less than the minimum required experience will eliminate that Proposer from further consideration.
- 8.3 Evaluation Criteria Quality and Qualifications, Physical Transponder Attributes, and Cost—100 total points possible for each type of transponder.

Proposers will be separately evaluated and ranked for each type of transponder in accordance with the criteria noted on the following page.

| Scoring Elements | Interior Mounted Sticker and Breakable Sticker | Exterior Mounted Sticker | Interior Mounted Switchable (2 and 3 position) |
|---|--|--------------------------------|--|
| Quality and Qualifications: Experience performing the work described in the Scope of Services; Strength and stability of the firm; and Approach to performing the Scope of Services. | 55 | 45 | 30 |
| Physical Transponder Attributes: Physical appearance; Durability; Ease of mounting in/on the vehicle; Ease of use by the customer; and Ease of carpool switch operation. | 5 | 25 | 30 |
| Cost: The cost evaluation will be based on the price per unit for each type of transponder and ability to provide enhancements/betterments. Proposer Price Score = Lowest Price Proposed X Maximum Proposer's Price Points | 40 | 30 | 40 |

9.0 DEBRIEFINGS

Proposers who submit proposal in response to this RFP shall be notified in writing regarding the results of the Evaluation Committee's recommendation for award.

Unsuccessful Proposers (those who were not awarded a contract) may obtain an explanation concerning the strengths and weaknesses of their proposal. Unsuccessful Proposers who wish to be debriefed should request a debriefing within ten (10) calendar days after the notice of contract award.

APPENDIX A – SCOPE OF SERVICES

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

SCOPE OF SERVICES

1. INTRODUCTION

Riverside County Transportation Commission (RCTC) is jointly operating the 91 Express Lanes with the Orange County Transportation Authority (OCTA) and is scheduled to open the 15 Express Lanes in 2020. The State of California is transitioning to ISO/IEC 18000-6C (6C) technology beginning January 1, 2019. In order to be compliant RCTC is in need of 6C transponders as described in this Scope of Services.

RCTC is a member of the California Toll Operator's Committee (CTOC) and 6C Coalition who have developed statewide 6C specifications attached as Appendix K to the RFP.

2. TRANSPONDERS

The Contractor shall provide one or more of the following transponder types:

- Interior mounted sticker;
- Interior mounted breakable sticker;
- Exterior mounted sticker;
- Interior mounted 2-position switchable; or
- Interior mounted 3-position switchable.

The Contractor shall comply with the following requirements for all transponders.

2.1 California 6C Electronic Toll Collection Standards, Appendix K

The Contractor shall comply with the CTOC requirements included in Appendix K. If the CTOC requirements change during the term of the contract the Contractor shall conform to the new requirements for future orders within 60 days of notification.

2.2 Read and Write Capabilities

Transponders shall have the ability to transmit the unique transponder identification data and other data contained on the transponder when read by the reader when passing through the toll point.

The Contractor shall provide the ability to lock the write access permanently or allow write access restricted by a password provided by RCTC.

2.3 Power

The transponder shall not require a power supply.

2.4 Consumer Product Safety

All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

2.5 Size

The interior mounted transponders shall be as small as possible, while meeting the requirements of this document. The transponder cannot be larger than the California Vehicle Code 26708 requirement for application of an object to a windshield, five (5) square inches.

The exterior mounted sticker transponder shall be as small as possible and preferably not exceed 105 mm by 25 mm.

2.6 Mounting

The exterior mounted sticker transponders shall be mountable on a headlamp. All interior mounted transponders shall be mounted on the interior of the windshield.

All transponders shall be designed to be secure when installed to prevent inadvertent displacement or projectile motion. All materials used to adhere a transponder shall be completely removable without damaging or marring the vehicle in any way. The Contractor shall supply the required mounting solution with all transponders.

The interior mounted switchable transponders shall be delivered with a two-sided mounting solution preinstalled, such as hook and loop, requiring the customer to only adhere the one half of the mounting solution to the windshield of the vehicle. The same side of a two-sided solution shall consistently be applied to the transponder to allow for ease of transfer from vehicle to vehicle. The mounting solution used shall be readily available in the market to support the provision of replacement of the windshield mounted side by RCTC over time.

The Contractor shall provide RCTC with the source and specifications for the mounting solution provided.

2.7 Bar Code

All transponders shall come with a uniquely identified bar code as provided for in Appendix K. The bar code shall be readable with the human eye and by a handheld reader.

For interior mounted sticker transponders the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For interior mounted switchable transponders the bar code may either be permanently etched in the hard case or printed on a non-removable sticker (decal) that will be readable for the life of the transponder. The placement of the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For exterior mounted sticker transponders a bar code shall be printed on the transponder and/or the same material to which the transponder is adhered. If not printed on the transponder, it should be made clear that the barcode is not the transponder and should be retained for the customers records.

2.8 Transponder Artwork

RCTC will provide the required artwork. Artwork will be four-color. The Contractor shall provide the design specifications for the artwork for placement on the transponder, by transponder type.

The Contractor shall be responsible for printing and adhering transponder graphics as provided by RCTC. The Contractor shall provide a transponder prototype with final artwork for approval by RCTC.

The Contractor shall conduct a design session to determine the placement of the artwork and bar code.

The decal shall appear to be part of the transponder and stay affixed for the life of the transponder without degradation.

Transponders shall not carry any visible manufacturer or contractor brand names.

The interior mounted sticker transponder and the interior mounted breakable sticker transponder will require artwork on the interior facing side only.

The interior mounted switchable transponders will require artwork on the internal facing side and may require artwork on the external facing side, if the Contractor's design has insufficient space for the required information.

The exterior mounted transponder will not require artwork.

2.9 Switchable Transponder Design

The switchable transponder shall have an occupancy designation switch which is easy to use, clearly indicates which occupancy position it is in and stays secure in the position until the customer changes the occupancy.

2.10 Packaging

Transponders shall be packaged for shipping by individual transponder type in a manner to ensure that they are not damaged during transport. Individual boxes shall include an exterior label with a bar code of the beginning and ending transponder serial number. Any breaks in transponder serial number sequence shall be indicated with a barcode on the outside of the box. The number of sequence breaks for any single box shall not exceed 3. All transponders shall be shielded during shipping to ensure they are not read in transit.

Boxes shall be stackable up to six boxes high without compromising the structure of the box. The box shall not weigh more than 25 pounds each.

2.11 Shipping

The Contractor shall deliver all transponders to the address(s) provided by RCTC. The Contractor shall comply with any and all current U.S. and international safety standards to permit unrestricted shipment by mail and commercial carriers with appropriate documentation.

The Contractor shall be responsible for tracking and replacing any boxes lost or damaged during shipment.

The manifest specified in Appendix K shall be provided electronically at the time of shipment. In addition, a printed manifest shall accompany the shipment.

2.12 Programming

All transponders shall be pre-programmed according to the specification in Appendix K. RCTC will provide the agency ID for each of its orders.

3. HANDHELD READER

The Contractor shall provide a fully functional portable handheld reader that can read the 6C transponder and transmit the data to a desktop or laptop computer. The reader shall have a display that supports both indoor and outdoor reading of transponders. The handheld reader shall support an external interface allowing it to exchange transponder data with a desktop or laptop workstation (supplied by others).

4. DOCUMENTATION

4.1 Certification of Compliance

The Contractor shall provide third party certification from certifiers approved by the California Toll Operators Committee (CTOC) for device standards compliance with the most recent version of the California 6C Electronic Toll Collection Standard, Appendix K. Omni Air Consortium is currently the only approved certifier. The transponders shall be certified no later than August 1, 2018. Upon receipt of the certification by the Contractor, but before August 1, 2018, the Contractor shall provide RCTC with the required certification documentation and ten (10) certified transponders for each contracted transponder type..

Recertification will be required under any of the following conditions:

- Changes to the CTOC standards;
- Changes to the manufacturing process;
- Changes to materials used; and
- Failures exceeding the acceptable failure rate defined in the Contract.

4.2 Licenses, Permits and Patents

The transponders shall comply with applicable federal, state and local licensing and regulations for transponder technology. Contractors shall document all related patents, licensing and regulations associated with their equipment.

4.3 Installation Instructions

The Contractor shall provide the following installation instructions for each of the transponders supplied:

- Interior mounted sticker transponder;
- Interior mounted breakable sticker transponder;
- Exterior mounted sticker transponder;
- Interior mounted 2-position switchable;

- Interior mounted 3-position switchable; and
- Interior mounted sticker transponder and an interior mounted 2 or 3-position switchable transponder mounted in the same vehicle. .

The installation instructions must comply with the California Vehicle Code 26708 requirement for application of an object to a windshield (lower left driver side five (5) inch square, lower right passenger side seven (7) inch square, or upper center five (5) inch square).

4.4 Disposal Procedures

If there are environmental restrictions for the disposal of any type of supplied transponder, the Contractor shall document the proper disposal procedures and the reason for the restrictions.

4.5 Handheld Reader Instructions

The Contractor shall provide a user operation manual for the supplied handheld reader.

5. SAFETY REQUIREMENTS

The transponders and handheld readers shall meet all applicable safety and environmental requirements related to the technology and its applications in addition to any requirements of this document. The transponders and handheld readers shall not pose either a short-term safety risk or a long-term health risk to drivers, technicians, or other people who may frequently be near the transponder or using the handheld reader. Safety labels shall be placed on equipment as appropriate based on prevailing laws, regulations, and standards.

The Contractor shall provide the Material Safety Data Sheet for any materials or equipment utilized within any supplied product that has a Material Safety Data Sheet. The Contractor shall provide any information regarding any other materials that may be considered hazardous or require special handling or disposal. All components used in the transponder and handheld reader shall be approved for use in consumer products in terms of safety. The transponder or handheld reader shall not give off dangerous substances at any time including when damaged.

6. ORDER PROCESS

The Contractor shall provide a direct point of contact for RCTC to place orders. The Contractor shall acknowledge receipt of the order within three (3) business days and provide a proposed delivery schedule.

7. INABILITY TO SUPPLY TRANSPONDERS

Within three (3) business days from the time of order, the Contractor shall acknowledge receipt of the order and adherence to the required delivery date. If the Contractor fails to respond within three (3) business days RCTC will assume the Contractor is unable to fulfill the order.

8. WARRANTY RETURNS

The Contractor shall provide a process for the return of transponders covered under warranty. Contractor shall act as the sole point of contact for warranty service. Contractor shall provide RCTC with warranty return instructions. Contractor shall pay for freight related to returned shipments.

9. QUALITY CONTROL

The Contractor shall perform quality control to ensure transponders comply with the requirements of the Contract. The Contractor shall conduct testing, as needed, to demonstrate compliance with the requirements. The Contractor shall provide RCTC with the Quality Control Plan. RCTC reserves the right to review any quality reports produced by the Contractor. RCTC or its designated representatives reserves the rights to visit the manufacturing and testing sites of the awarded Contractor(s).

10. ONGOING SUPPORT

The Contractor shall provide technical support and advice to RCTC or its designated representative at no additional cost during the term of the Contract. The Contractor shall support efforts to resolve transponder read issues arising from lane system compatibility, interference from in vehicle equipment (including multiple transponders), windshield material issues, or other issues causing a transponder read failures.

11. PRICING

Proposal pricing and delivery times includes full compliance with the requirements contained in this Scope of Services and with the requirements contained in Appendix J.

APPENDIX B – MODEL CONTRACT

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

RIVERSIDE COUNTY TRANSPORTATION COMMISSION ON CALL PURCHASE AGREEMENT FOR 6C TRANSPONDERS WITH [______]

| This On | Call Purchase | Agreement for 6C | Transpond | ders ("Agree | ement") is ent | ered |
|-------------------|-----------------|----------------------|------------|---------------|----------------|------------|
| into this | _ day of | , 2018, b | y and bet | tween the | Riverside Co | unty |
| Transportation | Commission | ("Commission"), | and _ | | | <u>,</u> a |
| [insert type | of legal e | entity] with i | ts princip | al place | of business | at |
| | (" | Contractor"). Con | nmission a | nd Contract | or are somet | imes |
| individually refe | rred to as "Par | ty" and collectively | as "Partie | s" in this Ag | reement. | |

RECITALS.

- A. The Commission has entered into On Call Purchase Agreements for 6C Transponders with a bench of qualified contractors selected pursuant to a request for proposal process ("On Call Bench").
- B. Contractor is one of the selected contractors, and may, during the term of this Agreement, receive one or more order requests from the Commission for Devices, as defined herein.
- C. Devices may be procured by the Commission for itself, and for the Orange County Transportation Authority ("OCTA").

Section 1. <u>DEFINITIONS.</u>

- A. "Delivery Date(s)" means that date or dates upon which the Transponders are to be delivered to Commission as set forth in each Purchase Order.
- B. "Devices" means the Transponders and Handheld Readers.
- C. "Handheld Readers" means portable handheld readers that can read the Transponders and transmit the data to a desktop or laptop computer, as further specified in Exhibit "A".
- D. "On Call Bench" shall have the meaning as set forth in Recital A above.
- E. "Purchase Order" means an order request from the Commission in the form attached hereto as Exhibit "B". To be valid, a Purchase Order must be signed by both Parties in accordance with the terms contained in this Agreement.
- F. "Transponders" means the 6C transponders, as specified in Scope of Services Section 2 of Exhibit "A,"

Section 2. AGREEMENT TERM.

- A. The term of this Agreement shall be three (3) years, commencing on the date first set forth above. The Commission shall have the option, in its sole discretion, to extend the term for two additional two-year extension terms. Any such extension shall be pursuant to a written amendment to this Agreement.
- B. Notwithstanding the foregoing, in the case a Purchase Order has been issued prior to the termination date, the term of this Agreement shall be automatically extended until delivery and acceptance of all Devices under such Purchase Order, and completion of payment therefor, or until termination of such Purchase Order in accordance with the provisions of Section 18.A below.

Section 3. PURCHASE ORDERS.

- A. To initiate the Purchase Order process, the Commission will issue a Purchase Order to the Contractor setting forth the desired Devices, quantity for the order, delivery times and pricing. Delivery time and pricing shall be based on the prices and delivery schedule set forth in Exhibit "C".
- B. Contractor must accept the terms of the Purchase Order and return the executed Purchase Order to the Commission within three (3) business days of the date of the Purchase Order. Notwithstanding any other provision of this Agreement, a Purchase Order not signed by Contractor and returned to the Commission in accordance with the foregoing shall be void.
- C. Any issuance of Purchase Orders to contractors on the On Call Bench shall be in accordance with the terms set forth in Exhibit "D".
- D. Purchase by the Commission of any Devices under this Agreement must be authorized by a Purchase Order. All Purchase Orders shall be performed in accordance with and subject to the terms and conditions of this Agreement, the exhibits attached hereto, and all applicable local, state and federal laws, rules and regulations. No Devices shall be delivered, and no payment made by Commission therefor, unless authorized by a valid and fully executed Purchase Order.

Section 4. <u>INSPECTIONS AND TESTS.</u>

Commission shall have the right to inspect and/or test the Devices. If upon inspection or testing the Devices or any portion thereof are found to be nonconforming, unsatisfactory, defective, of inferior quality or workmanship, or fail to meet any requirements or specifications contained in Exhibit "A," then without prejudice to any other rights or remedies, Commission may reject the Devices or exercise any of its rights under Section 5. The inspection, failure to make inspection, acceptance of goods,

or payment for goods shall not impair Commission's right to reject nonconforming goods, irrespective of Commission's failure to notify Contractor of a rejection of nonconforming goods or revocation of acceptance thereof or to specify with particularity any defect in nonconforming goods after rejection or acceptance thereof.

Section 5. WARRANTY.

A. General Warranty. Contractor warrants and represents that all of its Devices shall meet the requirements and specifications set forth in this Agreement. Contractor also warrants that the Devices are free and clear of all liens and encumbrances whatsoever, and that Contractor has a good and marketable title to same.

B. Transponder Warranty.

- i. Contractor warrants and represents, as to each Purchase Order, that all of its Transponders provided under the Purchase Order shall be free from defects in functionality, usability, and appearance for a period of three (3) years from the date of receipt by the Commission of the Transponders under the relevant Purchase Order.
- ii. If the Transponders provided under this Agreement have a third party warranty that exceeds the warranty period set forth in Section 5.B above, Contractor shall track and assign such third party warranty to the Commission on or before expiration of the warranty period set forth above in Section 5.B.

C. Transponder Warranty Procedures.

- i. Upon discovery of defective Transponders, the Commission or its designated representative shall ship the defective Transponders to Contractor.
- ii. Contractor shall ship conforming replacement Transponders to the address specified by the Commission in the documentation included with the defective Transponders. Contractor may use any shipping method provided the replacement Transponders arrive at the destination designated by the Commission within 120 days of receipt by Contractor of the defective Transponders.
- iii. Replacement Transponders shall be warrantied for the warranty period set forth in Section 5.B above.

- iv. Contractor shall be responsible and liable for all costs of shipping the defective Transponders to and from Contractor during the warranty period. Contractor shall reimburse the Commission for its shipping costs immediately upon demand.
- iv. Failure by the Contractor to provide replacement Transponders within 120 days, as required in (ii) above, shall result in a deduction by Commission from any outstanding payments owed to Contractor, or immediate repayment by Contractor of the purchase price of the defective Transponders not timely replaced.
- D. Handheld Readers Assignment of Third Party Warranties.

Except as otherwise set forth herein, Contractor shall not be required to provide a warranty for the Handheld Readers. Contractor shall track and assign to the Commission all third party warranties with respect to the Handheld Readers provided under this Agreement.

E. General Third Party Warranty Requirements.

Contractor's agreements with any third parties for Devices provided under this Agreement shall require that such parties consent to the assignment of all representations and warranties for such Devices to the Commission, and enforcement thereof by the Commission. Contractor shall provide all assigned third party warranties to the Commission within the time set forth in the schedule included with a Purchase Order, or as otherwise specified in this Agreement.

F. Excessive Failures of Transponders.

In the event of an excessive failure of Transponders delivered to the Commission under this Agreement, Contractor shall be liable for all costs incurred by the Commission, including, but not limited to: the public end user notification and replacement costs; and labor and material costs. Excessive failure is defined as a defect in function, labor or materials that is present in ten percent (10%) or more of any Transponder type provided under a Purchase Order. By way of example and not limitation, if 10% of the Transponders activated and assigned to customer accounts are deemed defective, then Contractor shall be responsible for the Commission's costs such as notifying customers; establishing and operating locations where the customers could swap out their defective Transponders for a working Transponder or other means of replacement; and the Commission's administrative costs.

G. Survival of Warranty Provisions.

The warranty provisions contained in this Section 5 shall survive any termination or expiration of this Agreement, and shall remain in effect for the full warranty term.

Section 6. INTELLECTUAL PROPERTY

- Α. Intellectual Property Rights for Transponders. Contractor warrants that Contractor owns or has a valid license for all of the proprietary technology and intellectual property including, but not limited to, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property Rights") incorporated within the Transponders. Contractor hereby grants to the Commission a fully paid-up, royalty-free, perpetual, irrevocable, non-exclusive license and/or sublicense to the Intellectual Property Rights contained in or used in connection with the Transponders to use, execute, maintain, display, perform, distribute, sell, create derivative works of, and to prepare derivative works based upon any Intellectual Property Rights provided by Contractor to the Commission under this Agreement. This license includes the right to make and have made copies of any and all software, firmware and documentation, and to use any and all such copies, reproductions, modifications, adaptations, improvements or derivative works to utilize and operate the Transponders. The license provided hereunder shall cover all aspects of software and firmware, except for source code to programs owned and/or developed by any of Contractor's subcontractors, and programs of any third parties which the Contractor integrates, bundles or provides as part of the Transponders. The Contractor shall secure all required licenses from any third party providers of software and firmware pursuant to the terms set forth above in the name the Commission, and shall ensure that such licenses are transferable to and assignable by the Commission, without additional compensation. The Contractor shall furnish the Commission with original license agreements it obtains from such third party providers of software and firmware upon delivery of the initial order of Transponders, and any such additional license agreements entered into thereafter that in any way effect Transponder's use of the Transponders. Contractor shall also provide to the Commission copies of the computer programs, disks and documentation for all software and firmware it obtains from third parties.
- B. <u>Intellectual Property Rights for Handheld Readers</u>. Contractor shall ensure that in providing the Handheld Readers, the Commission shall have all Intellectual Property Rights required for the full and unencumbered use of the Handheld Readers.

C. Remedies for Breach of Warranties or Intellectual Property Rights. In the event of a breach by Contractor of its obligations under Section 5 or this Section 6, Commission will not be limited to the remedies set forth in these sections, but will have all the rights and remedies permitted by applicable law, including without limitation, all of the rights and remedies afforded to Commission under the California Commercial Code. Contractor further agrees to indemnify, defend and hold the Commission and OCTA harmless against any and all third party claims resulting from the breach or inaccuracy of any of the warranties contained in Section 5 or this Section 6.

Section 7. PRICES.

Unless expressly provided otherwise, all prices and fees specified in Exhibit "C," attached hereto and incorporated herein by reference, are firm and shall not be subject to change without the written approval of Commission, and shall apply to all Purchase Orders under this Agreement for the term, and any extensions thereof. No extra charges of any kind will be allowed unless specifically agreed to in writing by Commission's authorized representative. Prices include (i) all federal, state and local use, excise, privilege, payroll, occupational and other taxes applicable to the Devices (excluding sales tax) furnished to Commission hereunder; (ii) all charges for packing, freight and transportation to destination, and (iii) full compliance with all requirements of this Agreement, including the attached Scope of Services and Technical Requirements.

The total compensation shall be specified under each Purchase Order, and shall not be exceeded.

Section 8. CHANGES.

Commission, at any time, by a written order, may make changes in the requirements for the Devices set forth in Exhibit "A", including but not limited to, Commission's requirements and specifications. If such changes affect the cost of the Devices or time required for performance under a Purchase Order, an equitable adjustment will be made in the price or time for performance under a Purchase Order, or both. Any change in the price necessitated by such change will be agreed upon between Commission and Contractor and such change will be authorized by an amendment to this Agreement, or to the Purchase Order, as applicable.

Section 9. PAYMENTS.

A. Terms of payment for each Purchase Order, are net thirty (30) days, less any applicable credits, or after receipt of invoice. Contractor shall invoice in accordance to the delivery schedule but not more frequently than each billing period. Final payment shall be made by Commission after Contractor has satisfied all contractual requirements for a Purchase Order. Payment of invoices shall not constitute acceptance of Devices.

B. Payments otherwise due may be withheld by Commission on account of defective Transponders not timely replaced in accordance with the warranty provisions, liens or other claims filed, reasonable evidence indicating probable filing of liens or other claims, failure of Contractor to make payments properly to its subcontractors or for material or labor, the failure of Contractor to perform any of its other obligations under the Agreement, or to protect Commission against any liability arising out of Contractor's failure to pay or discharge taxes or other obligations. If the causes for which payment is withheld are removed, the withheld payments will be made promptly. If the said causes are not removed within a reasonable period after written notice, Commission may remove them at Contractor's expense.

Section 10. SCHEDULE FOR DELIVERY.

The time of Contractor's performance is of the essence for this Agreement. The Devices will be delivered in accordance with the schedule set forth in each Purchase Order, and in accordance with the timeframes for delivery set forth in Exhibit "C". Contractor must immediately notify Commission in writing any time delivery is behind schedule or may not be completed on schedule.

The Commission's initial order, if authorized pursuant to a Purchase Order, shall be delivered by October 1, 2018 ("Initial Order"). The Initial Order quantities and requirements are as set forth in Attachment 1 to Exhibit "C". Contractor represents and warrants that it can meet the delivery time and schedule requirements for the Initial Order.

Section 11. TAXES.

- A. Contractor agrees to timely pay all sales and use tax (including any value added or gross receipts tax imposed similar to a sales and use tax) imposed by any federal, state or local taxing authority on the ultimate purchase price of the Devices provided under this Agreement. Sales tax is not included in the price of the Devices as set forth in Exhibit "C", and shall be determined at the time of issuance of a Purchase Order.
- B. Contractor will withhold, and require its subcontractors, where applicable, to withhold all required taxes and contributions of any federal, state or local taxing authority which is measured by wages, salaries or other remuneration of its employees or the employees of its subcontractors. Contractor will deposit, or cause to be deposited, in a timely manner with the appropriate taxing authorities all amounts required to be withheld.
- C. All other taxes, however denominated or measured, imposed upon the price of the Devices provided hereunder, will be the responsibility of Contractor. In addition, all taxes assessed by any taxing jurisdiction based on Contractor property used or consumed in the provision of the Devices such as and including ad valorem, use, personal property and

- inventory taxes will be the responsibility of Contractor.
- D. Contractor will, upon written request, submit to Commission written evidence of any filings or payments of all taxes required to be paid by Contractor hereunder.

Section 12. INDEPENDENT CONTRACTOR.

Contractor enters into this Agreement and all Purchase Orders as an independent contractor and not as an employee of Commission. Contractor shall have no power or authority by this Agreement to bind Commission in any respect. Nothing in this Agreement or any Purchase Order shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Contractor are employees, agents, contractors or subcontractors of the Contractor and not of Commission. Commission shall not be obligated in any way to pay any wage claims or other claims made against Contractor by any such employees, agents, contractors or subcontractors or any other person resulting from performance of this Agreement.

Section 13. SUBCONTRACTS.

Unless otherwise specified, Contractor must obtain Commission's written permission before subcontracting any portion of this Agreement. Except for the insurance requirements in Section 16.A, all subcontracts must require that the subcontractor be bound by and subject to all of the terms and conditions of this Agreement, and the relevant Purchase Order. No subcontract or order will relieve Contractor from its obligations to Commission and OCTA, including, but not limited to Contractor's insurance and indemnification obligations. No subcontract or order will bind Commission.

Section 14. TITLE AND RISK OF LOSS.

Unless otherwise agreed, Commission will have title to, and risk of loss of the Devices upon delivery. However, Contractor will be liable for any loss or damage to the Devices caused by Contractor or its subcontractors, their agents or employees, and Contractor will replace said Devices at its own cost to the complete satisfaction of Commission. Notwithstanding the foregoing, in the event that the Commission has paid Contractor for all or a portion of the Devices which remain in the possession of Contractor, then Commission shall have title to, and the right to take possession of, such Devices at any time following payment therefor. Risk of loss for any Devices which remain in the possession of Contractor shall remain with Contractor until such Devices have been delivered or Commission has taken possession thereof.

Section 15. INDEMNIFICATION.

A. Contractor shall defend, indemnify and hold the Commission, OCTA and their officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs,

expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Contractor, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the Transponders or the performance of this Agreement or any Purchase Order, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses except such loss or damage which was caused by the sole negligence or willful misconduct of the Commission.

- B. Contractor's defense obligation includes any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the Commission, OCTA and their officials, officers, employees, agents or volunteers shall be at Contractor's own cost, expense and risk. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against Commission, OCTA or their officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Contractor shall reimburse Commission, OCTA and their officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.
- C. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Commission, OCTA or their officials, officers, employees, agents or volunteers.

Section 16. INSURANCE.

- A. General. Contractor shall take out and maintain:
 - Commercial General Liability Insurance, of at least \$1,000,000 per occurrence/ \$2,000,000 aggregate for bodily injury, personal injury and property damage, at least as broad as Insurance Services Office Commercial General Liability most recent Occurrence Form CG 00 01;
 - 2. Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, of at least \$1,000,000 per accident for bodily injury and property damage, at least as broad as most recent Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto);
 - 3. Workers' Compensation in compliance with applicable statutory requirements and Employer's Liability Coverage of at least \$1,000,000 per occurrence; and

- 4. If Contractor is also the manufacturer of the Transponders, or any portion thereof, Contractor shall carry Product Liability and/or Errors and Omissions Insurance which covers said equipment with limits of not less than \$1,000,000.
- B. Additional Insured; Primary; Waiver of Subrogation; No Limitation on The policies required under this Section shall give Commission, OCTA and their officials, officers, employees, agents or volunteers additional insured status. Such policies shall contain a provision stating that Contractor's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the Commission or any additional insureds shall not be called upon to contribute to any loss, and shall contain or be endorsed with a waiver of subrogation in favor of the Commission, OCTA and their officials, officers, employees, agents, and volunteers. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement.
- C. <u>Insurance Carrier</u>. All insurance required under this Section is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.
- D. <u>Evidence of Insurance</u>. Contractor shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by the Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the Commission. All certificates and endorsements must be received and approved by the Commission before delivery commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.
- E. <u>Subcontractors</u>. All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.
- F. <u>Freight</u>. Contractor shall ensure that third party shippers contracted by Contractor have adequate insurance coverage for the shipped Devices.

Section 17. LIENS.

- A. Contractor, subcontractors and suppliers will not make, file or maintain a mechanic's or other lien or claim of any kind or character against the Devices, for or on account of any labor, materials, fixtures, tools, machinery, equipment, or any other things furnished, or any other work done or performance given under, arising out of, or in any manner connected with the Agreement (such liens or claims referred to as "Claims"); and Contractor, subcontractor and suppliers expressly waive and relinquish any and all rights which they now have, or may subsequently acquire, to file or maintain any Claim and Contractor, subcontractor and suppliers agree that this provision waiving the right of Claims will be an independent covenant.
- B. Contractor will save and hold Commission harmless from and against any and all Claims that may be filed by a subcontractor, supplier or any other person or entity and Contractor will, at its own expense, defend any and all actions based upon such Claims and will pay all charges of attorneys and all costs and other expenses arising from such Claims.

Section 18. <u>TERMINATION OF AGREEMENT OR PURCHASE ORDER BY</u> COMMISSION.

- A. Should Contractor at any time refuse or fail to deliver the Devices with promptness and diligence, or to perform any of its other obligations under this Agreement or any Purchase Order, Commission may terminate Contractor's right to proceed with the delivery of the Devices by written notice to Contractor. In such event Commission may obtain the Devices by whatever method it may deem expedient, including the hiring of another Contractor or other contractors. In such case Contractor will not be entitled to receive any further payments, other than for Devices delivered and accepted prior to termination.. If Commission's cost of obtaining the Devices, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the relevant Purchase Order, Contractor will be liable for and will pay the difference to Commission.
- B. Commission may, for its own convenience, terminate this Agreement at any time, provided that no Purchase Order is outstanding at the time of such termination. Such termination will be effective in the manner specified in such notice.
- C. Termination of this Agreement for convenience or cause shall be without prejudice to any claims which Commission may have against Contractor.

Section 19. NO EXPECTATION OF PURCHASE ORDER ISSUANCE

By entering into this Agreement, the Contractor acknowledges that the issuance of Purchase Orders is at the Commission's sole and absolute discretion. The Commission makes no representation or guarantee that it will issue any Purchase Orders under this Agreement, and the Contractor shall have no claim against the Commission for failure to make any orders hereunder. The Commission shall not be held responsible for any forecasts of anticipated purchases or requirements set forth in the procurement documents related to this Agreement, or otherwise.

Section 20. MISCELLANEOUS PROVISIONS.

A. <u>Delivery of Notices</u>. All notices permitted or required under this Agreement shall be given to the respective parties at the following address or at such other address as the respective parties may provide in writing for this purpose:

COMMISSION:

CONTRACTOR:

[INSERT]

Riverside County Transportation Commission 4080 Lemon Street, 3rd Floor Riverside, CA 92501

Attn: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

- B. <u>Assignment or Transfer</u>. Contractor shall not assign or transfer any interest in this Agreement or any Purchase Order whether by assignment or novation, without the prior written consent of the Commission, which will not be unreasonably withheld. Provided, however, that claims for money due or to become due Contractor from the Commission under this Agreement may be assigned to a financial institution or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer, whether voluntary or involuntary, shall be furnished promptly to the Commission.
- C. <u>Successors and Assigns</u>. This Agreement shall be binding on the successors and assigns of the Parties.

- D. <u>Amendment; Modification</u>. No supplement, modification or amendment of this Agreement or any Purchase Order shall be binding unless executed in writing and signed by both Parties.
- E. <u>Waiver</u>. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.
- F. <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.
- G. <u>Interpretation</u>. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party.
- H. <u>No Third-Party Beneficiaries</u>. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.
- I. <u>Authority to Enter Agreement</u>. Each Party warrants that the individuals who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.
- J. <u>Invalidity; Severability</u>. If any portion of this Agreement is declared invalid, illegal or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
- K. <u>Counterparts; Facsimile Signatures</u>. This Agreement may be signed in counterparts, each of which shall constitute an original. Facsimile signatures affixed to this Agreement or any Purchase Order, including signatures transmitted via electronic mail, shall be considered and shall have the same force and effect as original signatures.
- L. <u>Commission's Right to Employ Other Contractors</u>. Commission reserves its right to employ other Contractors in connection with the purchase of Devices.
- M. <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the Parties relative to the matters specified herein. There are no understandings, agreements, conditions, representations, warranties or promises with respect to this Agreement, except those contained in or referred to in the writing.

- N. <u>Conflicting Provisions</u>. In the event of any conflict between the terms of this Agreement and any exhibit or attachment hereto, the terms of this Agreement shall govern. In the event of any conflict between the terms of this Agreement and any Purchase Order issued pursuant to this Agreement, the terms of this Agreement shall govern.
- O. <u>Survival</u>. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.
- P. <u>Cooperative Use</u>. Contractor agrees that agencies within the California Toll Operators Committee ("CTOC") may utilize this Agreement to obtain Devices on the same terms and conditions included in this Agreement, through a separate agreement with Contractor. CTOC agencies may provide a different logo to be printed on the Transponder and different materials to accompany the retail Transponders. The Commission shall not be responsible or liable for any agreement between any CTOC agency and Contractor. The Commission makes no representation or warranty regarding the legal authorization for any CTOC agency to rely on the Commission's procurement of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE TO ON CALL PURCHASE AGREEMENT FOR 6C TRANSPONDERS BETWEEN THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION

| AND | [|] |
|-------|----------|---|
| AGREE | MENT NO. | |

| IN WITNESS WHEREOF, the Pathe day and year first above written. | rties hereto have executed this Agreement as of |
|---|---|
| RIVERSIDE COUNTY TRANSPORTATION COMMISSION | [INSERT] |
| By: Dana Reed, Chair | By: |
| APPROVED AS TO FORM: | ATTEST: |
| By: Best Best & Krieger LLP | By: |

A corporation requires the signatures of two corporate officers.

Counsel to the Riverside County Transportation Commission

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

lts:

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

EXHIBIT "A" SCOPE OF SERVICES

AND SPECIFICATIONS

APPENDIX A – SCOPE OF SERVICES FROM RFP

AND APPENDIX J – CALIFORNIA 6C ELECTRONIC TOLL COLLECTION STANDARD FROM RFP

TO BE INSERTED

EXHIBIT "B" FORM OF PURCHASE ORDER



Riverside County Transportation Commission

COUNTY 4080 LEMON ST.
TRANSPORTATION RIVERSIDE, CA 92501
951-787-7141

| DATE | PO NUMBER |
|------|-----------|
| | |

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SHIP TO: RIVERSIDE CO TRANSPORT COMMISSION 4080 LEMON STREET 3RD FLOOR RIVERSIDE, CA 92501

Req. No: Dept::

Terms: Issued in accordance with the Contract identified below and subject to all terms and conditions therein, and the device type, quantity, delivery date and prices below.

Contract No: Special Inst:

FOB Point:

By signing below, Contractor agrees to the terms of this Purchase Order. This Purchase Order must be signed by both parties to be valid. This Purchase Order shall be void if not signed by Contractor and returned to the Commission within three (3) days of the date above.

| Transponder Type | Quantity | Delivery Date | Unit Price | Extended Price |
|------------------|----------|---------------|------------|----------------|
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| BILL TO: | | TAX: | |
|----------------|--------|----------------|------|
| | | TOTAL: | |
| Account Number | Amount | Account Number | Amou |
| | | | |
| | | | |

Riverside County Transportation Commission Authorized Signature

Contractor

Exhibit "C" FEE SCHEDULE AND DELIVERY TIMES

TO BE INSERTED FROM CONSULTANT'S PROPOSAL

| Agreement No. | |
|---------------|--|
|---------------|--|

EXHIBIT "D"

USE OF ON CALL BENCH

As part of the procurement for this Agreement, the Commission has ranked the contractors on the On Call Bench. The established ranking is on file at the Offices of the Commission, and available for review upon request. The Commission will award Purchase Orders to the top ranked contractor on the On Call Bench for each type of Device to be procured by the Commission.

Should the top ranked contractor on the On Call Bench fail to perform (as determined by the Commission in accordance with the criteria set forth below), the Commission may award a Purchase Order to the next highest ranked contractor.

FAILURE TO PERFORM

Failure to perform by Contractor shall be established if the Contractor fails to do one or more of the following:

- Acknowledge receipt of and accept a Purchase Order within 3 business days of Commission emailing the Purchase Order to the designated Contractor representative;
- 2. Meet the delivery schedule in a Purchase Order;
- 3. Provide transponders that do not pass testing performed by the Commission or its agent. Testing will include the accuracy of the tag programming and functionality as defined in the Scope of Services. Failure for the purposes of this criteria shall be more than one transponder fails out of 200 from a single shipment;
- 4. Obtain or maintain Omni Air Certification (or other approved by the Commission);
- 5. Provide Transponders in accordance with the procured physical attributes and approved artwork;
- 6. Provide warranty replacement within 120 days of receipt by the Contractor:
- 7. Remedy Excessive Failures as defined in Section 5 G;
- 8. Otherwise perform under its Agreement with the Commission, resulting in a termination pursuant to Section 18 A.

APPENDIX C – CAMPAIGN CONTRIBUTION CERTIFICATION REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS



RIVERSIDE COUNTY TRANSPORTATION COMMISSION

DISCLOSURE OF CAMPAIGN CONTRIBUTIONS TO COMMISSIONERS

Government Code Section 84308, 2 California Code of Regulations 18438.1, Et Seq

No Commissioner of the Riverside County Transportation Commission shall receive or solicit a campaign contribution of more than \$250 from Bidder, or Bidder's agent, during the time of: 1) Bid solicitation; 2) Consideration of Bids received; and, 3) Awarding of a contract based on a Bid (collectively referred to as the "Proceeding"), and for 3 months following the conclusion of the Proceeding. This prohibition does not apply to the awarding of contracts that are competitively bid. In addition, Commissioners cannot participate in any such matters if they have received more than \$250 in campaign contributions within the last year from anyone financially interested in the Proceeding, such as Bidder and/or Bidder's agent.

Pursuant to these requirements, Bidder shall disclose any campaign contribution in an amount of more than \$250 made by Bidder, and/or Bidder's agent, to any Commissioner within 12 months from the date of these Bid Documents/Request For Proposals (as applicable). For the purposes of this disclosure obligation, contributions made by Bidder within the preceding 12 months shall be aggregated with those made by Bidder's agent within the preceding 12 months or the period of the agency relationship between Bidder and Bidder's agent, whichever is shorter. In addition, Bidder and/or Bidder's agent shall not make a contribution of more than \$250 to a Commissioner during the Proceeding and for 3 months following the conclusion of the Proceeding.

The disclosure by Bidder, as set forth, herein, shall be incorporated into the written record of the Proceeding and shall be made available to the public for inspection and copying.

The following is a list of the Commissioners of the Riverside County Transportation Commission:

Kevin Jeffries, County of Riverside, District 1 John F. Tavaglione, County of Riverside, District 2 Chuck Washington, County of Riverside, District 3 V. Manuel Perez, County of Riverside, District 4 Marion Ashley, County of Riverside, District 5 Deborah Franklin / Art Welch, City of Banning Lloyd White / Nancy Carroll, City of Beaumont Joseph DeConinck / Tim Wade, City of Blythe Jim Hyatt / Linda Molina, City of Calimesa Randall Bonner/ Vicki Warren, City of Canyon Lake Greg Pettis / Shelley Kaplan, City of Cathedral City Steven Hernandez / To Be Appointed, City of Coachella Karen Spiegel / Randy Fox, City of Corona Scott Matas / Russell Betts, City of Desert Hot Springs Adam Rush / Clint Lorimore, City of Eastvale Linda Krupa / Russ Brown, City of Hemet Dana Reed / To Be Appointed, City of Indian Wells

Michael Wilson / Glenn Miller, City of Indio Brian Berkson / Verne Lauritzen, City of Jurupa Valley Kathleen Fitzpatrick / Robert Radi, City of La Quinta Bob Magee / Natasha Johnson, City of Lake Elsinore Neil Winter / John Denver, City of Menifee Victoria Baca / Ulises Cabrera, City of Moreno Valley Rick Gibbs / Jonathan Ingram, City of Murrieta Berwin Hanna / Ted Hoffman, City of Norco Jan Harnik / Kathleen Kelly, City of Palm Desert Lisa Middleton / Geoffrey Kors, City of Palm Springs Michael M. Vargas / Rita Rogers, City of Perris Ted Weill / Charles Townsend, City of Rancho Mirage Rusty Bailey / Andy Melendrez, City of Riverside Andrew Kotyuk / Scott Miller, City of San Jacinto Michael S. Naggar / Matt Rahn, City of Temecula Ben Benoit / Timothy Walker, City of Wildomar John Bulinski, Governor's Appointee Caltrans District 8 I/We hereby disclose the following political contributions of more than \$250 made within the preceding 12 months and for 3 months following the conclusion of the Proceeding to any Commissioner:

| Date of Contribution | Amount of Contribution | Recipient |
|------------------------|---|-----------|
| | | |
| | | |
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| | | |
| | | |
| | (Attached Additional Sheet, If Necessary) | |
| | (Attached Additional Sheet, If Necessary) | |
| Date of Disclosure (Sa | ame As Bid Date): | |
| | | |
| BIDDER INFORMAT | ΓΙΟΝ: | |
| | | |
| | Signature of Bidder | |
| | | |
| | Name | |
| | Title | |
| | | |
| | Company | |
| | A 11 | |
| | Address | |
| | City, State, and Zip Code | |

APPENDIX D – PROPOSAL LETTER

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

PROPOSAL LETTER

RIVERSIDE COUNTY TRANSPORTATION COMMISSION 4080 LEMON STREET, THIRD FLOOR RIVERSIDE, CA 92501

SUBJECT: REQUEST FOR PROPOSAL/CONTRACT NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

In response to the above referenced Request for Proposals (RFP) and in accordance with the accompanying Instructions to Proposers and Submittal Requirements, we the undersigned hereby offer to perform and complete the work as required in the Contract Documents.

If recommended for contract award, will provide to the Commission all required Certificates of Insurance. The proposal submitted in response to subject RFP shall be in effect for 120 days after the proposal due date.

Further, the undersigned agrees to execute the Commission prepared Contract and provide all required Certificates of Insurance within ten calendar days after receipt of Notice of Award. The Proposer represents that the following person(s) are authorized to negotiate on its behalf with the Commission in connection with this RFP and will provide appropriate evidence of authorization upon request:

| (Printed Name) | (Title) | (Phone) | |
|----------------|---------|---------|--|
| (Printed Name) | (Title) | (Phone) | |
| (Printed Name) | (Title) | (Phone) | |

In addition to the formal certifications provided, the Proposer certifies that it has:

- 1. Examined and is fully familiar with all of the provisions of the RFP Documents and any amendment thereto;
- 2. Satisfied itself as to the requirements of the Contract;
- 3. Carefully reviewed the accuracy of all statements shown in this Proposal;

- 4. Examined the experience, skill and certification (if any) requirements specified in the Statement of Work and that the entities (Contractor, Subcontractor, Supplier) performing the work fulfill the specified requirements;
- 5. Satisfied itself with respect to other matters pertaining to the RFP which in any way affect the performance of the Work; and
- 6. Unless otherwise noted within this letter, the proposal has been submitted without exception and all Commission Contract Terms and Conditions are acceptable to the Proposer. Noted exceptions will be evaluated for responsiveness and significance, and may initiate discussions with the selected firm to clarify or resolve such exceptions. It is understood that if it is not in the best interests of the Commission to accept proposed exceptions, notice will be provided to the Proposer to accept the Terms and Conditions as stated in the RFP, or be eliminated for further consideration.

| Exceptions (if any): | | | |
|--|-----------|--|---------------|
| | | | |
| | | | |
| | | | |
| Therefore, the unders errors and/or omission | | s that the Commission will not be respon | sible for any |
| The undersigned ack amendment to the RF | | understanding and full consideration of | the following |
| Amendment/Addendu | ım No(s): | | |
| No. | Date | Initial | |
| | | | |

The Proposer further certifies that:

- 1. The only persons, firms, corporations, joint ventures/partnerships, and/or other parties interested in the Proposal as principals are those listed as such in the Proposal Forms;
- 2. The Proposal is made without collusion with any other person, firm, corporation, joint venture/partnership, and/or other party; and
- 3. Joint ventures/partnerships are to provide a signed copy of their agreement with their Proposal.

| Proposer's Name: | |
|------------------------------|--------------|
| Business Address: | |
| | |
| Contractor's License Number: | |
| License Expiration Date: | |
| Classification Type: | |
| Phone: | Fax: |
| E-Mail Address: | |
| | |
| (Signature of Authoriz | ed Official) |
| | |
| (Type or Print Name) | |
| | |
| (Title) | |
| (Date) | |
| (= 4.5) | |

APPENDIX E – REQUEST FOR CLARIFICATION FORM REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS



4080 Lemon Street, 3rd Floor • Riverside, CA Mailing Address: P.O. Box 12008 • Riverside, CA 92502-2208 951.787.7141 • 951.787.7920 • www.rctc.org

REQUEST FOR CLARIFICATIONS FORM

Submit this form, or a form in similar format, with your request for approved equals. **Incomplete requests will be rejected.** Submit your request by the due date in the Schedule.

| Request #: | Section #: | Page #: | Subsection #: | Paragraph #: |
|-------------------|------------------|-------------------------------|------------------------|-----------------|
| | | | | |
| Clarifications, F | Recommendations, | Approved Equal Req | uests (include rationa | ale): |
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| | | Requestor's Name Phone Number | | |
| | | - NA 11 | | |
| | | Date Submitted | | |

APPENDIX F – CONTRACTOR INFORMATION FORM REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS



4080 Lemon Street, 3rd Floor • Riverside, CA Mailing Address: P.O. Box 12008 • Riverside, CA 92502-2208 951.787.7141 • 951.787.7920 • www.rctc.org

CONTRACTOR INFORMATION FORM

| Name of Company: | | | | | |
|---|---|--|--|--|--|
| Address: | | | | | |
| Legal Status (i.e., Sole Proprietorship, Partnership, Corporation): | | | | | |
| Federal Tax I | .D. Number: | | | | |
| Authorized S | ignature for Agreement: | | | | |
| Contact Name | 9: | | | | |
| | | | | | |
| | Fax: () | | | | |
| E-mail: | | | | | |
| Point of Cont | act: | | | | |
| Contact Name | p: | | | | |
| Contact Title: | | | | | |
| Phone: () | Fax: () | | | | |
| E-mail: | | | | | |
| Is your comp | any a Certified Disadvantaged Business Enterprise (DBE)? | | | | |
| ☐ Yes ☐ I | No | | | | |
| Will your con under this ag | npany be utilizing Certified Disadvantaged Business Enterprise (DBE) firm(s) reement? | | | | |
| ☐ Yes ☐ I | No | | | | |

APPENDIX G – PROJECT REFERENCE FORM REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

PROJECT REFERENCE FORM

Please provide the following information for all projects for which you have produced and delivered similar products since January 2016. Provide at least two (2) references. The Commission will contact references to verify information provided and inquired of past performance data. Add additional pages, if necessary.

Reference # Customer **Customer Address Customer Contact Contact Phone** Number **Contact Email** Breakable 2-position 3-position **Products Supplied** Interior Sticker Exterior Sticker Sticker (check all that apply) Breakable 2-position 3-position **Total Quantity** Interior Sticker Exterior Sticker Sticker Supplied (by transponder type) Breakable 3-position **Minimum Quantity** 2-position Interior Sticker Exterior Sticker Sticker (per shipment) Breakable 2-position 3-position **Maximum Quantity** Interior Sticker Exterior Sticker Sticker (per shipment) Breakable 2-position 3-position **Delivery time** Interior Sticker Exterior Sticker Sticker Start and end of contract period **Total Contract Value Schedule or Quality** Issues and resolution

Reference #____

| Customer | | | | | |
|--|------------------|----------------------|------------------|------------|------------|
| Customer Address | | | | | |
| Customer Contact | | | | | |
| Contact Phone Number | | | | | |
| Contact Email | | | | | |
| Products Supplied (check all that apply) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| (Check all that apply) | | | | | |
| Total Quantity | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| Supplied (by transponder type) | | | | | |
| Minimum Quantity (per shipment) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| Maximum Quantity (per shipment) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| Delivery time | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| | | | | | |
| Start and end of | | | | | |
| contract period | | | | | |
| Total Contract Value | | | | | |
| Schedule or Quality | | | | | |
| Issues and resolution | | | | | |

Reference #____

| Customer | | | | | |
|--|------------------|----------------------|------------------|------------|------------|
| Customer Address | | | | | |
| Customer Contact | | | | | |
| Contact Phone Number | | | | | |
| Contact Email | | | | | |
| Products Supplied (check all that apply) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| (oneon an that apply) | | | | | |
| Total Quantity Supplied (by | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| transponder type) | | | | | |
| Minimum Quantity (per shipment) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| | | | | | |
| Maximum Quantity (per shipment) | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| (per simplificate) | | | | | |
| Delivery time | Interior Sticker | Breakable Sticker | Exterior Sticker | 2-position | 3-position |
| | | | | | |
| Start and end of | | | | | |
| contract period | | | | | |
| Total Contract Value | | | | | |
| Schedule or Quality | | | | | |
| Issues and resolution | | | | | |

| The undersigned certifies that the inform | nation provided above is true and correct. |
|---|--|
| Authorized Representative | |
| Title | Date |

APPENDIX H - PROPOSAL PRICING FORM

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

PROPOSAL PRICING AND DELIVERY TIME FORM

| Internal mounted sticker transponder | Weeks to Deliver (from purchase order date) | Price per Transponder (Base years 1 - 3) | | Price per Transponder (Option Period 1) | | Price per Transponder (Option Period 2) | |
|--------------------------------------|---|--|--------------------------|---|-----------------------------|---|------------|
| Order Quantity | • | • | • | | • | | · |
| 1 - 9,999 | weeks | \$ | - | \$ | - | \$ | - |
| 10,00 - 49,999 | weeks | \$ | - | \$ | - | \$ | - |
| 50,000 - 99,999 | weeks | \$ | - | \$ | - | \$ | - |
| 100,000 - 249,999 | weeks | \$ | - | \$ | - | \$ | - |
| 250,000 - 499,999 | weeks | \$ | - | \$ | - | \$ | - |
| 500,000 - 699,999 | weeks | \$ | - | \$ | - | \$ | - |
| 700,000 - 1,000,000 | weeks | \$ | - | \$ | - | \$ | - |
| Breakable Interior | Weeks to Deliver | Pri | ice per | | Price per | Price | per |
| mounted sticker | (from purchase | Transpo | nder (Base | Transp | onder (Option | Transponde | er (Option |
| transponder | order date) | yea | rs 1 - 3) | | Period 1) | Perio | d 2) |
| Order Quantity | | | | | | | |
| 1 - 499 | weeks | \$ | - | \$ | - | \$ | - |
| 500 - 999 | weeks | \$ | - | \$ | - | \$ | - |
| 1,000 - 4,999 | weeks | \$ | - | \$ | - | \$ | - |
| 5,000 - 10,000 | weeks | \$ | - | \$ | - | \$ | - |
| | Weeks to Deliver | Pri | ice per | | Price per | Price | per |
| Exterior mounted | (from purchase | Transpo | nder (Base | Trans | oonder (Option | Transponde | er (Option |
| sticker transponder | order date) | yea | rs 1 - 3) | | Period 1) | Perio | d 2) |
| Order Quantity | | | | | | | |
| 1 - 999 | weeks | \$ | - | \$ | - | \$ | - |
| 1,000 - 4,999 | weeks | \$ | - | \$ | - | \$ | - |
| 5,000 - 9,999 | weeks | \$ | - | \$ | - | \$ | - |
| 10,000 - 49,999 | weeks | \$ | - | \$ | - | \$ | - |
| 50,000 - 99,999 | weeks | \$ | - | \$ | - | \$ | - |
| 100,000 - 249,999 | weeks | \$ | - | \$ | - | \$ | - |
| 250,000 - 500,000 | weeks | \$ | - | \$ | - | \$ | - |
| Internal mounted 2- | Weeks to Deliver | | ice per | | Price per | Price | • |
| position switch | (from purchase | • | onder (Base | • | onder (Option | • | |
| transponder | order date) | yea | rs 1 - 3) | | Period 1) | Perio | d 2) |
| Order Quantity | | 1 | | 1 | | 1 | |
| 1 - 999 | weeks | \$ | - | \$ | - | \$ | - |
| 1,000 - 4,999 | weeks | \$ | - | \$ | - | \$ | - |
| 5,000 - 9,999 | weeks | \$ | - | \$ | - | \$ | - |
| 10,000 - 49,999 | weeks | \$ | - | \$ | - | \$ | - |
| 50,000 - 99,999 | weeks | \$ | - | \$ | - | \$ | - |
| 100,001 - 199,999 | weeks | \$ | - | \$ | - | \$ | - |
| 200,000 -299,999 | weeks | \$ | - | \$ | - | \$ | - |
| 300,000 - 400,000 | weeks | \$ | - | \$ | - | \$ | - |
| Internal mounted 3- | Weeks to Deliver | | ice per | T | Price per | Price | • |
| position switch transponder | (from purchase order date) | - | onder (Base rs 1 - 3) | • | oonder (Option Period 1) | Transponde Perio | |

PROPOSAL PRICING AND DELIVERY TIME FORM

Order Quantity

| 1 - 999 | weeks | \$ - | \$ | - | \$ | - |
|-------------------|-------|---------|----|---|----|---|
| 1,000 - 4,999 | weeks | \$ - | \$ | - | \$ | - |
| 5,000 - 9,999 | weeks | \$ - | \$ | - | \$ | - |
| 10,000 - 49,999 | weeks | \$ - | \$ | - | \$ | - |
| 50,000 - 99,999 | weeks | \$ - | \$ | - | \$ | - |
| 100,001 - 199,999 | weeks | \$ - | \$ | - | \$ | - |
| 200,000 -299,999 | weeks | \$ - | \$ | - | \$ | - |
| 300,000 - 400,000 | weeks | \$ - | \$ | - | \$ | - |

| Printing of exterior facing artwork on switchable transponder | | Price per Transponder (Base years 1 -3) | Price per Transponder (Option Period 1) | Price per Transponder (Option Period 2) |
|---|----------------|---|---|---|
| | Not Applicable | \$ - | \$ - | \$ - |
| Hand Held Reader | | Price per Reader (Base years 1 -3) | Price per Reader (Option Period 1) | Price per Reader (Option Period 2) |
| | Not Applicable | \$ - | \$ - | \$ - |
| | | Price per 10,000 | Price per 10,000 | Price per 10,000 |
| Mounting Solution | | (Base years 1 -3) | (Option Period 1) | (Option Period 2) |
| | Not Applicable | \$ - | \$ - | \$ - |

Proposed prices shall include all costs including shipping and handling

Initial Order Quantities and Requirements - Attachment 1

| Transponder Type | Quantity | Delivery Date |
|--|----------|---------------|
| Internal mounted sticker transponder | 500,000 | 10/1/2018 |
| Exterior mounted sticker transponder | 25,000 | 10/1/2018 |
| Internal mounted 3-position switch transponder | 50,000 | 10/1/2018 |

APPENDIX I – 91 AND 15 EXPRESS LANES TRANSPONDER PROJECTION

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

91 Express Lanes Transponder Estimate

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|----------------------------------|---------|--------|--------|--------|--------|---------|
| 6C Transponder Projections | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| Sticker | 500,000 | 42,176 | 46,394 | 51,033 | 56,136 | 695,738 |
| Breakable Stickers | 50 | 10 | 10 | 10 | 10 | 90 |
| 2-Position Switchable | - | - | - | - | - | - |
| 3-Position Switchable | 50,000 | 3,667 | 4,034 | 4,438 | 4,881 | 67,021 |
| External (Assumes 5% of Sticker) | 25,000 | 2,109 | 2,320 | 2,552 | 2,807 | 34,787 |
| Total | 575,050 | 47,962 | 52,757 | 58,032 | 63,834 | 797,636 |

^{1.} RCTC is not committed to the projected quantities identified above. The projects are for vendor cost estimate purposes only. Vendors shall propose cost per transponders at its own risk.

^{2. 15} Express Lanes transponder estimate are not available. 15 Express Lanes is anticipated to open 2020.

APPENDIX J – CALIFORNIA 6C ELECTRONIC TOLL COLLECTION STANDARD

REQUEST FOR PROPOSALS NO. 18-31-094-00 6C TRANSPONDERS AND HAND HELD READERS

CALIFORNIA 6C ELECTRONIC TOLL COLLECTION STANDARD VERSION 1.0

MAY 5, 2017

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1. INTRODUCTION

1.1 Purpose

The purpose of this document is to create and maintain a standard based on the ISO/IEC 18000-6C (known as 6C) communication protocol for tolling applications that use automatic vehicle identification (AVI). The guidance is intended for tag and reader manufacturers, toll lane vendors, system integrators, back-office providers, and other members of the RFID industry. This standard meets the interoperability requirements developed by IBTTA's Roadside Interoperability Group.

1.2 Scope

This document addresses the following areas of interest:

- Memory Mapping
- Transponder Requirements
- Reader Requirements
- Security and Data Integrity Validation

1.3 Definitions, Acronyms, and Abbreviations

| AFI | Application Family Identifier |
|-------|--------------------------------|
| CRC | Cyclic Redundancy Check |
| DSFID | Data Storage Format Identifier |
| EPC | Electronic Product Code |
| HOV | High Occupancy Vehicle |

IEC International Electrotechnical Commission
ISO International Organization for Standardization

NAK Negative Acknowledgement

PC Protocol Control

RFID Radio Frequency Identification

TID Transponder Identification Gen2 transponder memory bank 10

TSN Transponder Serial Number

USer Memory Gen2 transponder memory bank 11

Ull Unique Item Identifier, ISO/IEC 18000-6C transponder memory bank 01

XPC Extended protocol control

2. MEMORY MAPPING

The ISO/IEC 18000-6C transponder memory is separated into four memory banks:

| Bank 00 | Reserved |
|---------|--------------|
| Bank 10 | TID |
| Bank 01 | CRC, PC, UII |
| Bank 11 | User Memory |

2.1 Reserved Memory Specification

The Reserved memory shall be programmed by the tag provider and contents shared with the issuing agency.

2.2 TID Memory Specification

The Transponder Identification (**TID**) memory shall contain a minimum of 64 bits (8 byte) unalterable unique chip ID programmed by the chip manufacturer. This field will not be specified to be any particular value, but it is assumed to be unique for all -6C chips, per the ISO 18000-6C standard.

2.3 Memory Bank 01 Specification

There are three memory areas contained with Memory Bank 01.

- Stored CRC This 16 bit long area is stored at memory location 00h 0Fh and is calculated by the transponder.
- Stored PC This area is 16 bits long and is stored at memory location 10h 1Fh. The PC word contains the Application Family Identifier (AFI) an 8 bit identifier (the value being 0xB0) assigned to the 6C Toll Operators Coalition. This number has been assigned for tolling by ISO, along with the Data Storage Format Identifier (DSFID, value of 0x3E) and explicitly describes a tag belonging to the 6C Toll Operators Coalition.

This number can be used to filter the responses of tags to ensure that only toll tags are being read.

The PC word is encoded during chip initialization and is dependent on the type of chip being encoded, not on an individual tag's data.

 Unique Item Identifier (UII) – This area is at least 96 bits long and is stored beginning at memory location 20h. Any memory in excess of 96 bits is undefined and may be used by the issuing agency; however, the additional memory shall not interfere with any of the functionality contained in this document. The UII shall provide read-only access to users. The issuing agency may lock write access permanently or may allow write access by a password maintained by the issuing agency.

2.3.1 MEMORY MAP

| Area | # | Memory Address | Section | Description | Values | | |
|-----------|-----------------------|----------------------|----------------------------------|---|---|--|--|
| Stored | 1- 16 | 00h-0Fh (16 bits) | Calculated | Area is calculated based on other transponder memory values per ISO 18000-6C specification. | Varies | | |
| 0 | 1-5 | 10h-14h (5 bits) | Length | Number of 16 bit words in the UII | 00110 = 6 words (indicates 96 bit UII) - will vary based on UII length | | |
| | 6 | 15h (1 bit) | User Memory | Indicates status of the User Memory | 0 = no user memory 1 = user memory available | | |
| Stored PC | 7 | 16h (1 bit) | XPC | Indicates status of extended tag features | 0 = no XPC 1 = XPC available | | |
| St | 8 | 17h (1 bit) | Numbering System Indicator | Indicates if the tag is coded as an EPC or ISO tag. | 0 = EPC 1 = ISO (correct value for 6C TOC applications) | | |
| | 9- 16 | 18h-1Fh (8 bits) | AFI | Application Family Identifier for 6C TOC – 0xB0 | 1011 0000 = 6C TOC AFI (B0) | | |
| | 1-8 | 20h-27h (8 bits) | DSFID | Data Storage Format Identifier for 6C TOC – 0x3E | 0011 1110 = 6C TOC DSFID (3E) | | |
| III | 9 - 21 | 28h–34h (13 bits) | Agency Use | Individual agencies may add agency specific information here. | Assigned by agency | | |
| | 22- 33 | 35h-40h | Classification | Classification is taken directly from E-ZPass Inter- Customer Service Center Interface File and Reporting Specifications, Appendix C and includes: | | | |
| | | (1 bit) | Class | The first bit indicates if the tag has been assigned a classification value. If 0 is selected, the following 11 bits shall be ignored. | 0 = no class value assigned (default) 1 = class value assigned | | |
| | (5 bits) Vehicle Type | | Vehicle Type | This field indicates the type of vehicle. | 00000 = undefined (default) 00001 = automobile 00010 = motorcycle 00011 = pickup truck 00100 = van (seats 1-9) 00101 = minibus (seats 10-15) 00110 = bus (seats 16+) 00111 = recreational vehicle 01000 = truck 01001 = auto transporter (≤ 65') 01010 = auto transporter (>65') 01011 = tractor & trailer (≤48') 01100 = tractor & trailer (>48') 01101 = tractor & dual trailers each (≤28.5') 01111 = tractor & dual trailers each (>28.5') 01111 = tractor & dual trailers each (one ≤28.5' other >28.5') | | |

| Area | # | Memory Address | Section | Description | Values | | |
|------|-----------|----------------------|---------------------------------|--|--|--|--|
| | | | | | 10000 = undefined 10001 = tractor/mobile home combination 10010-11111 = undefined | | |
| | | (4 bits) | Vehicle Axles | This field indicates the number of axles. | 0000 = undefined (default) 0001 = undefined 0010 = 2 axles 0011 = 3 axles 0100 = 4 axles 0101 = 5 axles 0110 = 6 axles 0111 = 7 axles 1000 = 8 axles 1001 = 9 axles 1010 = 10 axles 1011 = 11 axles 1100 = 12 axles 1101 = 13 axles 1110 = 14 axles 1111 = 15 axles | | |
| | | (1bit) | Vehicle Weight | This field indicates the weight of vehicle. | $0 = \le 7,000 \text{ lbs (default)}$ 1 = > 7,000 lbs | | |
| | | (1 bit) | Vehicle Rear Tires | This field indicates the number of rear tires. | 0 = Single rear tires (default) 1 = Dual rear tires | | |
| | 34- 36 | 41h-43h (3 bits) | Dealerstien dealerstien status | | 000 = single mode (default) 001 = SOV (non-carpool) 010 = HOV 2+ 011 = HOV 3+ 100 = Carpool (as defined by roadway) 101 = reserved for future use 110 = reserved for future use 111 = reserved for future use | | |
| | 37- 40 | 44h-47h (4 bits) | Version | on There are 16 possible values to indicate the version of 6C TOC programming standard used on the tag. There are 16 possible 0000 = unassigned 0001 = Ver. 1.0 0010 = Ver. 2.0 0011 = Ver. 3.0 | 0010 = Ver. 2.0 | | |
| | 41- 52 | 48h-53h (12 bits) | Agency | The Agency Code allows for up to 4,096 agencies. The known agencies are included in the values column. See Appendix A for details. | See Appendix A – Table of Agencies | | |
| 8 | 53- 80 | 54h-6Fh (28 bits) | Transponder Serial Number | This identifies the particular tag within the agency. There are 268,435,456 values accommodated in this space. The values in this field will be assigned by each agency. | Assigned by agency | | |
| | 81- 96 | 70h-7Fh (16 bits) | UII Validation (Hash Value) | This is calculated using the first 80 UII bits and 32 byte key. Example is provided in Section 5. | Assigned at the time of transponder manufacturer. Calculated as per Section 5. | | |

Table 1: UII Memory Mapping

2.4 User Memory Specification

As of the publication date of this Version, none of the current 6C toll operators write to their tags, nor do any of them read the User memory. It is anticipated that this memory bank may be required to accommodate future group members or affiliates. The following general specifications shall apply.

The User memory shall have at least 512 bits (64 bytes).

The User memory bank shall be designated as a temporary data field, where facilities may read and write whatever information is necessary, recognizing that the data may be overwritten at any time. For example, an agency operating a closed ticket type of system may choose to use this bank and write trip start date, time, location, and price as the trip begins and read this information at the conclusion of the trip. This could be used to compute the correct toll.

Any agency-specific use of User memory outside the specifications in this document should be closely coordinated to reduce the risk of future conflicts.

DSFID - Data Storage Format Identifier

The DSFID declares the data format for the data in User Memory. The User Memory portion of the tag shall have the following format:

| # | Memory Address | Section | Description | Values |
|-------|----------------------|----------------------|---|---|
| 1-8 | 00h-07h (8 bits) | DSFID | Data Storage Format Identifier | 0011 1110 = 6C TOC DSFID (3E) |
| 9-20 | 08h-23h (12 bits) | Agency | 12 bit Agency Code. As assigned in the previous section. | Section 2.3.1 |
| 21-27 | 24h-1Ah (7 bits) | Plaza ID | 7 bit Plaza ID. Each operator may choose. | To be defined by agencies using this field. |
| 28-32 | 1Bh-1Fh (5 bits) | Lane ID | 5 bit Lane ID. Each operator may choose. | To be defined by agencies using this field. |
| 33-57 | 20h-38h (25 bits) | Day/Time | 25 bit Day . Each operator may choose. (seconds since Jan 01 00:00:00) | To be defined by agencies using this field. |
| 58—60 | 39h-3Bh (3 bits) | Occupancy Setting | 3 bit Occupancy. Each operator may choose. | To be defined by agencies using this field. |
| 61+ | 3Ch - | Undefined | The remaining bits may be defined as individual agency needs arise. | |

Table 2: User Memory Mapping

3. TRANSPONDER REQUIREMENTS

3.1 Transponder Characteristics

All values are measured per the EPC Global Tag Performance Parameters and Test Methods Version 1.1.3 test protocol, limited to the 902 – 928 MHz frequency range and modified as follows:

- Use a horizontally, linearly polarized test antenna;
- With tags mounted on material applicable for the intended location on the vehicle; and
- As described in Section 3.1.3.

3.1.1 MINIMUM ACTIVATION ENERGY

Tags shall have a minimum activation energy (forward link range) resulting in a test read range between 7 m and 12 m.

3.1.2 RETURN SIGNAL STRENGTH (BACKSCATTER RANGE)

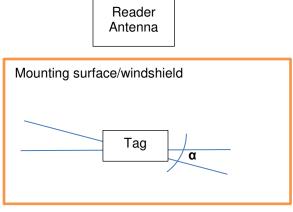
Tags shall have a return signal strength (reverse link range) resulting in a test read at a minimum of 14 m.

3.1.3 ANTENNA POLARIZATION AND POINTING LOSS

Tags shall be horizontally polarized.

When tilted +/- 15 degree horizontally (see Figure 1) from the installation reference angle defined by the transponder manufacturer, tags shall have a minimum activation energy (forward link range) resulting in a test read range between 5 m and 12 m. For example, when a tag is not installed horizontally level ("crooked").

Tilt from horizontal reference plane = α



Front View

Figure 1. Diagram schematically depicting tilt from horizontal angle between tag placement and reader antenna.

When tilted +/- 45 degrees vertically (see Figure 2) from the installation reference angle defined by the transponder manufacturer, tags shall have a minimum activation energy (forward link range) resulting in a test read range between 5 m and 12 m. For example, this addresses windshield angles between steeply sloped windshields (sports car) and near vertical windshields (semi-tractor trailers).

Tilt from vertical reference plane = Φ

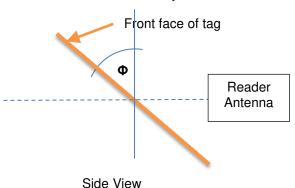


Figure 2. Diagram schematically depicting tilt from vertical angle between tag placement and reader antenna.

When rotated +/- 18 degrees from the horizontal plane (see Figure 3) from the installation reference angle defined by the transponder manufacturer, tags shall have a minimum activation energy (forward link range) resulting in a test read range between 5 m and 12 m. For example, this addresses transponder mounting locations on flat windshields versus curved windshields and headlights.

Rotation from horizontal reference plane = Θ

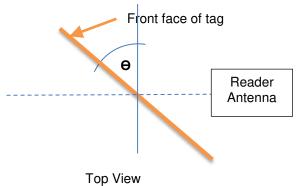


Figure 3. Diagram schematically depicting rotation from horizontal plane angle between tag placement and reader antenna.

3.2 Tag Environmental Conditions

Transponders shall be able to perform under the following environmental conditions:

1. All interior transponders shall be able to be subjected to and operated in 95% humidity, non-condensing environments.

- 2. All exterior transponders shall operate in 100% humidity, condensing environments.
- 3. Tags shall be able to operate at temperatures between 40° F and +185° F.
- 4. Sunlight screening shall be built into both the internal and external transponders to ensure they perform as well under conditions of direct sunlight as in overcast conditions.

3.3 Barcode Format

The transponder barcode includes only the Agency Code and the Transponder Serial Number along with a check digit. The barcode shall be printed using EPC Code 128 and the code data digits shall be in decimal format AAAATTTTTTTTTL where AAAA is the Agency Code as a 4-digit number with leading zeros, TTTTTTTTTT is the Transponder Serial Number (TSN) as a 10-digit number with leading zeros and L is the Luhn check digit computed using only the last 2 digits of the Agency Code and all 10 digits of the TSN.

Below the barcode the Agency Code, the TSN and the check digit shall be displayed in the following decimal format <AA>AA TTTTTTTTT L. The printed Agency Code shall NOT contain leading zeros and shall be separated from the TSN by a double space., where <AA>AA is the Agency code excluding leading zeros. The TSN shall include the leading zeros (to fill all 10 digits) and shall be separated from the check digit number L by a double space.

<AA>AA TTTTTTTTT L

Where:

<AA>AA = 4 digit Agency Code (leading zeroes not printed)

TTTTTTTT = 10 digit Transponder Serial Number (leading zeroes printed)

L = Check digit Luhn (mod10) coded – calculated based upon **<AA>AA** (third and fourth digits only) and **TTTTTTTTT** (all ten digits)

For example, a transponder with serial number 12 for agency 77 would return 00770000000123 as the barcode content and the printed information below the barcode would be **77 000000012 3**.

Similarly for agency 449 a transponder with serial number 12 would return 04490000000122 as the barcode content and the printed information below the barcode would be 449 000000012 2.

3.4 Transponder Ordering and Delivery (Manifest information)

To facilitate loading of data in back office transponder inventory on transponder delivery, manufacturers should provide a file with comma separated UII memory and TID. Each transponder entry should be on a new line:

12_Byte_UII_Memory,TID (length varies)

0101CE00010000000101CE8C, E2003412012EC0FFEE041392

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¹ Note: Values shown are for illustrative purposes only and are not actual/valid EPC or TID values. A 12 byte TID is used for example purposes.

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4. READER REQUIREMENTS

4.1 ISO Commands

The following ISO reader commands are optional:

- 1. NAK
- 2. Kill
- 3. Lock

5. SECURITY AND DATA INTEGRITY VALIDATION

5.1 Overview

Transponder security is critical to the toll industry. It is anticipated that as more security features become available they will be evaluated and deployed, as appropriate. The following security measures are currently employed.

5.2 Memory Bank Security

5.2.1 RESERVED MEMORY BANK

- 1. The Access Password shall have a Lock Status of locked with an Access Password known to and secured by the transponder issuing agency.
- The Kill Password and its Lock Status shall be configurable by the transponder issuing agency. It is recommended that the transponder issuing agency configure tags to permanently disable the ability to kill their tags.

5.2.2 TID MEMORY BANK

The transponder identification number shall be uniquely assigned by the manufacturer. It shall be readable without a password, cannot be altered and must be unique.

5.2.3 UII MEMORY BANK

- 1. The transponder issuing agency shall be the only entity authorized to change the encoded bits on the transponder. UII memory bank shall have a Lock Status of locked.
- 2. UII Authentication/Validation The UII memory data should be authenticated with two hashed validation bytes. The UII Validation bytes can be used for transponder data verification and can also provide some level of transponder authentication. Further details are contained in Section 5.3.

5.2.4 USER MEMORY BANK

- Password The User memory shall be writable without a password. The User memory bank shall have a Lock Status of unlock.
- 2. Authentication/Validation Authentication and validation shall not be used.

5.2.5 ENCRYPTION

Under development.

5.3 Ull Validation

Below is example of how the UII validation bytes shall be calculated using:

- 1. The first 10 bytes of the UII (starting with the "DSFID" field)
- 2. The 32 byte key (determined by the tag issuing agency)
- 3. The bytes of the transponder TID² (length varies see footnote)

For ensuring interagency interoperability and consistency between transponders manufactured by different vendors the open standard SHA1 hashing algorithm shall be used. The hashing sequence shall be:

- Concatenate the 10 UII memory bytes, the 32 byte key and the TID bytes to form a single byte sequence
- b. Determine the SHA1 hash of this byte sequence above
- c. For UII Validation the first 2 bytes from the 40 byte hash result shall be used.

UII Validation Reference Calculation is provided below:

UII 10 byte: 0x**FFFFFFFFFFFFFFF**

Key 32 byte:

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Result 20 byte hash value: 0x167F9C5B3933148B68AAD51EE3C4B5F858166451

UII Validation bytes: 0x167F

Tags which are not fully serialized (that is, have at least a 48 bit unique serial number) will not conform to this standards document and should not be used for interoperable 6C tolling deployments.

² The TID length can vary per the ISO 18000-6C specification. For fully serialized tags, the complete header and serialized portion of the TID (which can be anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits) will be used for the indicated calculations. Per the standard, the length of a transponder's TID serial number is indicated on each transponder, in bits 20h - 22h of the TID. Version 1.0 Page 12

6. APPENDICES

6.1 Appendix A – Table of Agencies

| Agency | Acronym | State | Status | Decimal | Hex | Binary |
|---|--------------|-------|------------|----------------|-------------|-----------------------------------|
| Reserved | N/A | N/A | Reserved | 0 | 0 | 0000 0000 0000 |
| North Carolina Turnpike Authority | NCTA | NC | Assigned | 33 | 21 | 0000 0010 0001 |
| Washington State Department of Transportation | WSDOT | WA | Assigned | 77 | 4D | 0000 0100 1101 |
| Bay Area Toll Authority | BATA | CA | Assigned | 101 | 65 | 0000 0110 0101 |
| California Department of Transportation | CalTrans | CA | Assigned | 102 | 66 | 0000 0110 0110 |
| Transportation Corridor Agency | TCA | CA | Assigned | 103 | 67 | 0000 0110 0111 |
| | | | Unassigned | 104 | 68 | 0000 0110 1000 |
| Golden Gate Bridge, Highway and Tunnel District | GGBHTD | CA | Assigned | 105 | 69 | 0000 0110 1001 |
| Los Angeles County Metropolitan Transportation Authority | LACMTA | CA | Assigned | 106 | 6A | 0000 0110 1010 |
| Orange County Transportation | LACIVITA | CA | Assigned | 100 | UA | 0000 0110 1010 |
| Authority | OCTA | CA | Assigned | 107 | 6B | 0000 0110 1011 |
| Riverside County Transportation Commission | RCTC | CA | Assigned | 108 | 6C | 0000 0110 1100 |
| San Diego Association of Governments | SANDAG | CA | Assigned | 109 | 6D | 0000 0110 1101 |
| Santa Clara Valley Transportation Authority | VTA | CA | Assigned | 110 | 6E | 0000 0110 1110 |
| South Bay Expressway, LLC | SBX | CA | Assigned | 111 | 6F | 0000 0110 1111 |
| Sunol SMART Carpool Lanes Joint Powers Authority | Sunol JPA | CA | Assigned | 112 | 70 | 0000 0111 0000 |
| San Francisco County Transportation Authority | SFCTA | CA | Assigned | 113 | 71 | 0000 0111 0001 |
| San Bernardino Associated Governments | SANBAG | CA | Assigned | 114 | 72 | 0000 0111 0010 |
| Concession A25 sec | A25 | QC | Assigned | 115 | 73 | 0000 0111 0011 |
| Port of Hood River | POHR | OR | Assigned | 116 | 74 | 0000 0111 0100 |
| McAllen-Hidalgo & Anzalduas Bridges | MHAB | TX | Assigned | 118 | 76 | 0000 0111 0110 |
| E-470 | E-470 | CO | Assigned | 194 | C2 | 0000 1100 0010 |
| State Road & Toll Way Authority | SRTA | GA | Assigned | 321 | 141 | 0001 0100 0001 |
| Puerto Rico Highway and Transportation Authority | PRHTA | PR | Assigned | 448 | 1C0 | 0001 1100 0000 |
| Louisville-Southern Indiana Ohio River Bridges | LSIORB | KY | Assigned | 449 | 1C1 | 0001 1100 0001 |
| Louisiana Department of Transportation and Development | LADOTD | LA | Assigned | 450 | 1C2 | 0001 1100 0010 |
| Utah Department of Transportation | UDOT | UT | Reserved | 1409 | 581 | 0101 1000 0001 |
| Washington State Department of Transportation | WSDOT | WA | Reserved | 1505 | 5E1 | 0101 1110 0001 |
| Transportation Investment Corporation | TI Corp | ВС | Assigned | 2305 | 901 | 1001 0000 0001 |
| Blue Water Bridge Authority | BWBA | ON | Assigned | 2529 | 9E1 | 1001 1110 0001 |
| Reserved for Testing Table A-1: Agency IDs. fr | TEST | N/A | Reserved | 4080 - 4095 | FF0- FFF | 1111 1111 0000- 1111 1111 1111 |

Table A-1: Agency IDs, for most current list, please contact Caltrans.