



**RFP Authority:**

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**Request for Proposals  
(RFP)**

For

The Performance of the  
Work described herein.

**THIS DOCUMENT CONTAINS  
A SECURITY REQUIREMENT**

<b>Title:</b> Qualification of Virtual Testing Tools for Automated Driving Systems.	
<b>Solicitation Number:</b> T8080-200621	<b>Date:</b> April 19, 2021
<b>Bid Closing Date:</b> Bids must be received by no later than 14:00 (2 p.m) on May 28 <sup>th</sup> , 2021 (Central time) at the bid receiving email address indicated on this page. Bids received after the closing date and time (referred to as the “Closing Date”) will be considered non-responsive.	
<b>Enquiries:</b> Bids must be structured in the following manner: <ul style="list-style-type: none"> <li>• One (1) electronic copy of a Covering Letter, signed by an authorized representative of the Bidder;</li> <li>• One (1) electronic copy of the Technical Bid;</li> <li>• One (1) electronic copy of the Certifications and,</li> <li>• One (1) electronic copy of Financial Bid contained in separate attachment</li> </ul>	
<b>Bid Validity:</b> Bids will remain valid for a period of ninety (90) calendar days following the Closing Date.	
<b>Enquiries:</b> All enquiries must be submitted in writing to the RFP Authority identified by no later than ten (10) calendar days prior to the Closing Date in order to allow sufficient time to provide a response.	



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## **PART 1 - GENERAL INFORMATION**

### **1.1 Statement of Work**

The Work to be performed is detailed under ANNEX 'A' of the resulting contract clauses.

### **1.2 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) 2020-05-28 Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### **2.2 Submission of Bids**

#### **BID SENT BY EMAIL**

You are invited to submit electronic copies in either official language (English or French) of both the Technical and Cost Proposals. The RFP Reference Number and the title of the Requirement must be in the subject line of your email and your proposal must be structured in accordance to section A12 – Bid Content on the cover page.

No price or cost information should appear in any other section of the bid. Failure to provide the Financial Bid in a separate attachment will render a bid non-responsive.

If the email including attachments is larger than 20mb, please submit your bid in separate emails to not exceed Transport Canada's server limitation.

Bidders who submit a bid in response to this RFP agree to be bound by the instructions, clauses and conditions of the RFP and accept the terms and conditions of the resulting contract.

It is the Bidder's responsibility to obtain, if necessary, clarification of the requirements contained in the RFP and to prepare its bid in accordance with the instructions contained in the RFP. Enquiries must be submitted in writing to the Contract Authority.

The RFP documents contain all the requirements relating to the bid solicitation. Any other information or documentation provided to or obtained by a Bidder from any other source is not relevant and not part of this RFP. Bidders should not assume that practices used under previous RFPs or contracts will continue, unless they are identified in the RFP. Bidders should also not assume that their existing capabilities meet the requirements of the RFP simply because they have met previous requirements.



## 2.2.1 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 15 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

## 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

## 2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## 2.5 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
  - Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

The bid must be gathered per section and separated as follows:



- Section I: Technical Bid
- Section II: Financial Bid
- Section III: Certifications
- Section IV: Additional Information

**Section I: Technical Bid**

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

**Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment.

**3.1.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “B” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “B” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

**3.1.2 SACC Manual Clauses**

**Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.

**PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

**4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

**4.1.1 Technical Evaluation**

**4.1.1.1 Mandatory Technical Criteria**

Proposals that fail to meet the following mandatory requirements will be discarded at this stage without further consideration and the bidder's proposal will be considered to be non-responsive.

No.	Requirement	Pass/Fail	Cross reference to Proposal
M1	The Bidder must demonstrate that the proposed <b>Project Manager</b> has a minimum of 5 years' experience at a senior level managing R&D projects. <i>*A copy of the CV must be provided with the bidder's technical proposal at time of bid submission.</i>		



No.	Requirement	Pass/Fail	Cross reference to Proposal
M2	The Bidder's proposed <b>Senior Engineer</b> resources must each have, as a minimum, a bachelor's degree in mechanical, electrical, or aerospace engineering or an equivalent. <i>*A copy of the CVs and degrees must be provided with the bidder's technical proposal at time of bid submission.</i>		
M3	The Bidder's proposed <b>Software Engineer</b> resource must have, as a minimum, a bachelor's degree in computer science or an equivalent. <i>*A copy of the CV and degree(s) must be provided with the bidder's technical proposal at time of bid submission.</i>		
M4	The Bidder's proposed Engineer resources must each have experience in R&D projects related to road safety. These projects must have had a value greater than \$100K and duration of at least 3 months (within the last 5 years). The roles and experience of these resources with respect to these projects must be clearly identified by the Bidder.		
M5	The Bidder must demonstrate that the proposed team has significant and recent (within last 5 years) experience and expertise in safety verification of ADAS and/or ADS.		
M6	The Bidder must demonstrate that the proposed team has significant and recent (within last 5 years) experience and expertise in modeling and simulation of vehicle operations in a virtual environment.		
M7	The Bidder must demonstrate that he has access to the necessary equipment (software and hardware) to model and simulate vehicle operations in a virtual environment.		
M8	All additional team members must have BA, BSc or equivalent. University Credential (Degree, Diploma, etc.) <i>*A copy of the CVs and degrees must be provided with the bidder's technical proposal at the time of submission.</i>		

#### 4.1.1.2 Point Rated Technical Criteria

Proposals meeting all Mandatory Criteria will be evaluated and rated against the Point-Rated Criterion (R1-R13) in the table below. For the technical proposal the total score will be established as follows:

No.	Requirement	Substantiating Detail	Point Distribution	Score
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No.	Requirement	Substantiating Detail	Point Distribution	Score
R1	<p>The Bidder should demonstrate that the proposed <b>Project Manager</b> has experience for successfully managing (on time and on budget) R&amp;D projects. These projects must have had a value greater than \$100K and duration of at least 3 months (within the last 5 years).</p>		<p><i>Maximum 5 pts</i> 1 pt for each project to max of 5 pts</p>	/ 5
R2	<p>The Bidder must demonstrate that the proposed <b>Project Manager</b> has recognized professional accreditation as demonstrated by CPM (Certified Project Manager), PMP (Project Management Professional Certification PMP - PMI) or equivalent. *A copy of the certificate must be provided at time of bid submission.</p>		<p><i>Maximum 5 pts</i> 0 pt: Not evident 5 pts: CPM, PMP, or equivalent accreditation</p>	/ 5
R3	<p>Education qualifications of the <b>Project Manager</b>. Proof of education must be provided in the proposal package.</p>		<p><i>Maximum 5 pts</i> 0 pt: Not evident 2 pts: Bachelor degree or equivalent in engineering, or business administration, or project management or related field 5 pts: MSc degree or equivalent in engineering or business administration or project management or related field</p>	/ 5
R4	<p>The Bidder should demonstrate that the proposed <b>Senior Engineer, expert in ADS/ADAS safety verification</b> has recent and significant experience in validation of hardware and software using automotive industry's best practices. This is demonstrated by years of experience and projects, publications, technical reports in the last 5 years.</p>		<p><i>Maximum 10 pts</i> (a) Years of experience: 1 pt for each year to max of 5 pts (b) Productivity last 5 years: 1 pt each for projects, technical reports and/or publications to max of 5 pts</p>	/ 5  / 5



No.	Requirement	Substantiating Detail	Point Distribution	Score
R5	Education qualifications of the <b>Senior Engineer, expert in ADS/ADAS safety verification</b> . Proof of education must be provided in the proposal package.		<i>Maximum 5 pts</i> 0 pt: Not evident 2 pts: Bachelor degree in mechanical, electrical, or aerospace engineering or related field 3 pts: Master degree in mechanical, electrical, or aerospace engineering or related field 5 pts: PhD in mechanical, electrical, or aerospace engineering or related field	/ 5
R6	The Bidder should demonstrate that the proposed <b>Senior Engineer, expert in ADS/ADAS performance testing</b> has recent and significant experience in evaluating ADS/ADAS with accepted test standards. This is demonstrated by years of experience and projects, publications, technical reports in the last 5 years.		<i>Maximum 10 pts</i> (a) Years of experience: 1 pt for each year to max of 5 pts (b) Productivity last 5 years: 1 pt each for projects, technical reports and/or publications to max of 5 pts	/ 5  / 5
R7	Education qualifications of the <b>Senior Engineer, expert in ADS/ADAS performance testing</b> . Proof of education must be provided in the proposal package.		<i>Maximum 5 pts</i> 0 pt: Not evident 2 pts: Bachelor degree in mechanical, electrical, or aerospace engineering or related field 3 pts: Master degree in mechanical, electrical, or aerospace engineering or related field 5 pts: PhD in mechanical, electrical, or aerospace engineering or related field	/ 5
R8	The Bidder should demonstrate that the proposed <b>Software Engineer, expert in computer simulation</b> has recent and significant experience in modeling ADS/ADAS in the domain of vehicle operations within a virtual environment. This is demonstrated by years of experience and projects, publications, technical reports in the last 5 years.		<i>Maximum 10 pts</i> (a) Years of experience: 1 pt for each year to max of 5 pts (b) Productivity last 5 years: 1 pt each for projects, technical reports and/or publications to max of 5 pts	/ 5  / 5





No.	Requirement	Substantiating Detail	Point Distribution	Score
R9	<p>Education qualifications of the <b>Software Engineer, expert in computer simulation</b>. Proof of education must be provided in the proposal package.</p>		<p><i>Maximum 5 pts</i>            0 pt: Not evident            2 pts: Bachelor degree in computer science or related field            3 pts: Master degree in computer science or related field;            5 pts: PhD in computer science or related field</p>	/ 5
R10	<p>Participation to regulatory and standardization groups on safety verification, ADS/ADAS testing, functional safety, safety of the intended functionality, and virtual testing.</p> <p>The bidder's proposal should provide evidence for each membership by any of the team member to working groups relevant to the project. Example of standard organizations and regulatory groups : ISO TC204, ISO TC22/SC33, ASAM OpenX, SAE ORAD, IEEE P2846, UNECE/WP.29 GRVA/VMAD.</p>		<p><i>Maximum 20 pts</i>            2 pts for each membership to maximum of 20 pts</p>	/ 20
R11	<p>Additional team member qualifications.</p> <p>For each resource the bidder's proposal should provide evidence of years of experience and project experience in the ADS/ADAS. Experience should be demonstrated by similar and/or related work. CVs must be provided. Rating will correspond to the average for the team members (not including the Project Manager, the 2 Senior Engineers and the Software Engineer resources).</p>		<p><i>Maximum 10 pts</i>            (a) Average years of experience:            0.5 pt for each year of experience to maximum of 5            (b) Average project experience:            0.5 pt for each project to a maximum of 5</p>	/ 5  / 5



No.	Requirement	Substantiating Detail	Point Distribution	Score
R1 2	Bidder's organization, its relevant experience and competence in safety verification of ADS/ADAS and simulation-based testing in the domain of vehicle operations within a virtual environment. Experience should be proven by similar or related work.		<i>Maximum 10 pts</i> 1 pt per R&D project to a maximum of 10	/ 10
R1 3	<p>The Bidder's proposal should demonstrate an understanding of the requirements of the Statement of Work. Sufficient detail should be provided to allow a complete demonstration of the Bidder's understanding of the project requirements and proposed approach, which should include the following:</p> <p>a) Demonstrating an understanding of the scope, background, rationale and context of the project as well as knowledge of the Transport Canada's motor vehicle safety oversight program and self-certification regulatory regime.</p>		<p><i>Maximum 100 points</i></p> <p>0 pt: Not evident: poor and incorrect understanding of scope 5 pts: Inadequate: poor understanding of scope. Incomplete, sketchy or lacking any evidence of understanding 10 pts: Adequate: complete and correct understanding of scope but without any additional insights 15 pts: Good: complete and correct understanding of scope with possible additions to scope proposed or a more complete understanding 20 pts: Excellent: complete and correct understanding of scope combined with significant added insights that demonstrate the completeness of understanding</p>	/ 20



No.	Requirement	Substantiating Detail	Point Distribution	Score
b)	<p>Demonstrating an understanding of the considerations and knowledge needed to produce the deliverables. Clear articulation of the importance of integration with industry's best practices and on-going development of standards and regulations. Demonstrating added value that the bidder will bring to the project:</p> <p>(i) an overview of existing work related to the topics described in the tasks 1, 2, and 3.</p> <p>(ii) how the results of the project can be used in the future</p>		<p>0 pt: Not evident: poor and incorrect understanding of considerations and knowledge</p> <p>5 pts: Inadequate: poor understanding of considerations and knowledge. Incomplete, sketchy or lacking any evidence of understanding</p> <p>10 pts: Adequate: complete and correct understanding of knowledge and considerations but without any additional insights</p> <p>15 pts: Good: complete and correct understanding of knowledge and considerations with possible additions to scope proposed or a more complete understanding of the industry</p> <p>20 pts: Excellent: complete and correct understanding of knowledge and considerations combined with significant added insights that demonstrate the completeness of understanding</p>	/ 20
c)	<p>Demonstrating a well-developed work plan.</p> <p>The work plan will be scored based on how the Bidder will ensure the tasks and allocation of resources will meet the project delivery date. To include:</p> <p>(i) key tasks (5 pts)</p>		<p>0 pt: Unsatisfactory: Information is unreasonable and unlikely to achieve the final delivery date</p> <p>2.5 pts: Satisfactory: Information is provided and reasonably supports project achievement in time for final delivery date</p> <p>5 pts: Exceeded: Information is provided and strongly supports bidders ability to meet the delivery dates</p>	/ 5



No.	Requirement	Substantiating Detail	Point Distribution	Score
	<p>(ii) milestones (5 pts)</p> <p>(iii) allocation of proposed resources by role, task, and the associated level of effort, availability of team members, backup capability, reporting structure etc. (30 pts)</p> <p>(iv) Project management tools or methodology. Adequacy of management support systems, tools or methodology and project management process demonstrating how the project will be kept on time and on budget (10 pts)</p>		<p>0 pt: Unsatisfactory: Information is unreasonable and unlikely to achieve the final delivery date</p> <p>2.5 pts: Satisfactory: Information is provided and reasonably supports project achievement in time for final delivery date</p> <p>5 pts: Exceeded: Information is provided and strongly supports bidders ability to meet the delivery dates</p> <p>0 pt: Unsatisfactory: Information is unreasonable and unlikely to achieve the final delivery date</p> <p>15 pts: Satisfactory: Information is provided and reasonably supports project achievement in time for final delivery date</p> <p>30 pts: Exceeded: Information is provided and strongly supports bidders ability to meet the delivery dates</p> <p>0 pt: Unsatisfactory: Information is unreasonable and unlikely to achieve the final delivery date</p> <p>5 pts: Satisfactory: Information is provided and reasonably supports project achievement in time for final delivery date</p> <p>10 pts: Exceeded: Information is provided and strongly supports bidders ability to meet the delivery dates</p>	<p>/ 5</p> <p>/ 30</p> <p>/ 10</p>



No.	Requirement	Substantiating Detail	Point Distribution	Score
d)	Demonstrating an understanding of project challenges, including those not provided in the SOW and strategies to overcome them.		0 pt: Not evident: poor and incorrect recognition of problems and solutions 2.5 pts: Inadequate: poor recognition of problems and solutions. Incomplete, sketchy or lacking any evidence of understanding 5 pts: Adequate: complete and correct recognition of problems and solutions but without any additional insights 7.5 pts: Good: complete and correct recognition of problems and solutions or a more complete understanding of the industry 10 pts: Excellent: complete and correct recognition of problems and solutions combined with significant added insights that demonstrate the completeness of understanding	/ 10
<b>Total points</b>				<b>/ 200</b>
<b>70% Pass mark</b>				<b>140</b>

#### 4.1.2 Financial Evaluation

The Bidder must complete this pricing schedule and include it in its financial bid. The estimated level of effort is for planning and evaluation purposes and this number may be adjusted upon final contract award.

Resource	Firm All-Inclusive Daily Rate	Estimated level of Effort (DAYS)	Total
Project Manager	\$	25	\$
Senior Engineer	\$	65	\$
Senior Engineer	\$	60	\$
Software Engineer	\$	65	\$
Total <b>Evaluated</b> Price:			\$



Applicable Taxes	\$
<b>Total Estimated Cost of Professional Fees:</b>	\$

**Additional Resources (as-and-when).**

The following firm all-inclusive daily rates are requested to be submitted by the Bidder. The pricing table below will not be evaluated and does not form part of the financial evaluation. The table shall be used as firm rates within the resulting contract.

Resource	Firm All-Inclusive Daily Rate	Estimated level of Effort (DAYS)	Total
Junior Engineer	\$	35	\$
Technician	\$	24	\$

**4.2 Basis of Selection**

1. To be declared responsive, a bid must:
  - a. comply with all the requirements of the bid solicitation;
  - b. meet all mandatory technical evaluation criteria; and
  - c. obtain the required minimum points for the technical evaluation criteria which are subject to point rating
  
2. Bids not meeting (a) or (b) or (c) will be declared non responsive. The responsive bid with the highest number of points will be recommended for award of a contract, provided that the total evaluated price does not exceed the budget available for this requirement.

**PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

**5.1 Certifications Required with the Bid**



Bidders must submit the following duly completed certifications as part of their bid.

### **LEGAL NAME AND BIDDER'S INFORMATION**

Bidder's Legal Name: \_\_\_\_\_

Bidder's Complete Address: \_\_\_\_\_

Bidder's Phone number: \_\_\_\_\_

Bidder's Authorized Representative: \_\_\_\_\_

Bidder's Authorized Representative Phone number:

(\_\_\_\_\_) \_\_\_\_\_

Bidder's Authorized Representative e-mail: \_\_\_\_\_

Bidders must provide the required certifications at bid submission. Canada may declare a bid non-responsive if the required certifications are not part of the bid content.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before and after awarding of a contract). The RFP Authority will have the right to ask for additional information to verify Bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the RFP Authority for additional information will also render the Bid non-responsive.

### **Education and Experience**

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

### **Status and Availability of Resources**

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

### **Former Public Servant - Competitive Bid**

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable



the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

### **Definitions**

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c. C-8.

### **Former Public Servant in Receipt of a Pension**

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** ( ) **No** ( )

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

### **Work Force Adjustment Directive**

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** ( ) **No** ( )





If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

## 5.2 Signature and Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

---

Signature

---

Date

---

Print Name and Capacity

### 5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

### 6.2 Statement of Work

Attached as ANNEX 'A'

### 6.3 Standard Clauses and Conditions



All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

### **6.3.1 General Conditions**

**2010C** 2020-05-28, General Conditions - Services (Medium Complexity), apply to and form part of the Contract.

## **6.4 Term of Contract**

### **6.4.1 Period of the Contract**

The period of the Contract is from contract award to March 31, 2022 inclusive.

## **6.5 Authorities**

### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Sean Stiff  
Title: Procurement Specialist  
Department: Transport Canada  
Address: 344 Edmonton Street  
Winnipeg, MB R3B 2L4  
Telephone: 432.335.3482  
E-mail address: [sean.stiff@tc.gc.ca](mailto:sean.stiff@tc.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### **6.5.2 Project Authority**

The Project Authority for the Contract is:

Provided at contract award.

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### **6.5.3 Contractor's Representative**

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:



## **6.6 Proactive Disclosure of Contracts with Former Public Servants.**

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2019-01 of the Treasury Board Secretariat of Canada.

## **6.7 Payment**

### **6.7.1 Basis of Payment**

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

### **6.7.2 Limitation of Price**

SACC *Manual* clause [C6000C](#) 2017-08-17 Limitation of Price

### **6.7.4 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);

## **6.8 Invoicing Instructions**

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

- a. a copy of time sheets to support the time claimed;
- b. a copy of the release document and any other documents as specified in the Contract;
- c. a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
- d. a copy of the monthly progress report.

Invoices must be distributed as follows:

One (1) copy must be forwarded to the Project Authority identified under the section entitled "Authorities" of the Contract.

## **6.9 Certifications and Additional Information**

### **6.9.1 Compliance**



Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

#### **6.10 Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

#### **6.11 Priority of Documents**

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A 2020-05-28;
- (c) Statement of Work;
- (d) the Contractor's bid

#### **6.12 Dispute Resolution**

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".



## ANNEX "A"

### STATEMENT OF WORK

#### Scope

As new vehicle technologies advance progressively towards higher levels of automation, new tools and testing methodologies are being developed by industry to validate the safety of these features, including, greater use of simulation-based testing.

In close collaboration with other governments and international experts, TC is taking the next steps needed to understand the ever-evolving landscape of Connected and Automated Vehicle (CAV) technologies, and how our safety regime can be adapted to support them. As part of this effort TC is seeking the assistance of an external research team to examine potential approaches for qualifying virtual test platforms (i.e. confirming the accuracy and therefore reliability of virtual testing) as it may be applied by developers to assess the safety performance of Automated Driving Systems (ADS).

#### Objectives

The objectives of the project are to:

- 1) review ADS safety assessment metrics and select the most relevant (i.e. important from a safety perspective) for simulation-based testing of road vehicles;
- 2) develop a procedure to quantify the accuracy of a virtual ADS test;
- 3) outline the process required to qualify virtual test platforms.

#### Background

An automated driving system is comprised of the hardware and software capable of performing the task of driving. It includes three key components: the sensors, the control units, and the actuators. The sensors detect the vehicle's environment, such as the surrounding vehicles and objects, road characteristics and weather conditions. The control units fuse the signals from the different sensors while complex algorithms determine the actions of the vehicle (braking, steering, accelerating). The actuators then execute the decisions made by the control units.

The safety validation and verification of ADS performance represent a difficult challenge. The physical test methods typically used to validate the functions of advanced driving assistance systems (e.g. automated braking system and lane keeping assistance) focus on a limited set of conditions. As vehicle systems become more capable, the testing requirements grow exponentially and it would take enormous resources considering the myriad of potential driving situations to be replicated on a test track or to be experienced during on-road evaluation. Automotive safety experts are therefore proposing to combine physical with virtual testing to evaluate the performance of ADS according to all the potential conditions within its operating design domain. The proposed scenario-based approach requires an extensive scenarios database (requirement definition and data collection), identifying the most relevant and critical scenarios, optimizing test parameters, and performing the tests in virtual and physical environments.

Simulation-based testing, one of the phases in the validation process, may be used to assess the data processing and decision making capabilities of the ADS software (software-in-the-loop). Some hardware components (e.g. control units) can also be evaluated with simulation-based testing when integrated into the virtual test platform (hardware-in-the-loop).

While virtual testing has an obvious advantage over the traditional track test approach to address the entire range of ADS operating conditions, there is a need to develop a method to ensure the accuracy of simulation-based test results. This represents the main goal of the tasks described in this statement of work.



The first task will provide the safety measurement parameters required to evaluate the performance of ADS. These outcomes will be used in the second task to develop a method for verifying that the virtual test results correlate with real-world data. The third task will build upon these findings to establish potential approaches for qualifying a virtual test platform for conducting simulation-based compliance tests of ADS. These last two tasks are key to assess the repeatability and reproducibility of the process.

All the solutions proposed as a result of this statement of work should be compatible with Transport Canada's self-certification regulatory regime.

## Terminology

ADAS	Advanced Driving Assistance System
ADS	Automated Driving Systems
AEB	Automated Braking System
ASAM	Association for Standardisation of Automation and Measuring Systems
CAV	Connected and Automated Vehicle
DIL	Driver-In-the Loop
GRVA	Working Party on Automated/Autonomous and Connected Vehicles
HIL	Hardware-in-the-Loop
IEEE	Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization
LSS	Lane Support System
MIL	Model-In-the Loop
NHTSA	National Highway Traffic Safety Administration
SIL	Software-in-the-Loop
SOW	Statement of Work
TA	Technical Authority
TC	Transport Canada
TJA	Traffic Jam Assist
UNECE	United Nations Economic Commission for Europe
VIL	Vehicle-In-the Loop
VMAD	Validation Method for Automated Driving

## Requirements

### Scope of Work

The work described in this SOW is intended to explore potential approaches for qualifying virtual test platforms (i.e. confirming the accuracy and therefore reliability of virtual testing) as it may be applied by developers to assess the safety performance of Automated Driving Systems.

## Tasks

### Task 1. Definition of Safety Assessment Metric

Current metrics used to assess the performance of ADS have several limitations. For example, it is not possible to compare the performance of two automated driving systems based on the distance driven without collision if one has been evaluated on 2-way rural roads and the other one tested on urban roads with heavy traffic and intersections. The values measured do not necessarily reflect the true performance of the ADS.

This task consists of reviewing ADS safety measurement metrics proposed by the scientific community and reporting on their suitability for simulation-based testing. Key metric properties (e.g. sensitive, objective, reliable, repeatable, practical) required for ADS and virtual testing shall also be identified. The review shall also include a critical assessment of the approaches and specific metrics currently available,



how they are used, by whom, with what sort of success, what are the concerns (e.g. using different combinations of metrics either in terms of measurement incapability or necessary equipment), and if data is available to assess the metrics' performance.

Using an evaluation tool or template developed by the contractor, a comprehensive list with detailed descriptions highlighting the advantages and shortcomings of each safety metric identified shall be provided. A categorization scheme can be used to group metrics by scenario or other relevant characteristics. The final list shall clearly describe the logic and rationale for metric inclusion and be ranked by order of relevance for simulation-based testing.

The findings will be summarized in a report. The report shall include, as a minimum:

- a description of the review methodology used and the resources consulted;
- a list of key metric properties and associated analysis procedures and criteria;
- a list of safety metrics with description and comments; and
- a recommendation (with justifications) for the most important metrics from the perspective of safety<sup>1</sup> for ADS compliance testing.

## **Task 2. Development of a Procedure to Assess the Accuracy of Virtual Testing**

First, a series of physical track tests performed by Transport Canada at the Motor Vehicle Test Centre will be replicated in a virtual environment. These track tests evaluate the performance of advanced driving assistance systems (ADAS). The data recorded during these tests will be provided by Transport Canada. The recorded data includes measurements of vehicles' performance and environmental conditions. The ADAS functions evaluated include automated braking system (AEB), lane support system (LSS), and traffic jam assist (TJA). These ADAS were tested according to standard procedures (e.g., NHTSA, Euro NCAP, UNECE). The contractor will need to generate the test scenarios, model the environmental conditions and ADAS functions and use publically available vehicle and sensor (e.g. camera, radar) models. A sufficient number of discrete tests for each ADAS function (i.e. AEB, LSS, and TJA) shall be re-enacted to provide statistically significant results.

After reviewing current best practises, the physical and virtual test results will be analyzed to identify key performance indicators. It is expected that different parameters will have to be considered, including the safety metrics identified in Task 1. The findings will be used to develop a method to reliably and accurately compare and quantify the discrepancies between the outcomes of simulation and real-world testing.

While the present task will be limited to the Model-In-the-Loop<sup>2</sup> (MIL), recommendations shall be made on practical solutions compatible with the other available platforms (SIL, HIL, VIL, and DIL) with considerations to protect proprietary information while giving access to the regulator of sufficient data to verify the validity of the physical results.

The findings will be summarized in a report. The report shall include, as a minimum:

- a description of the different steps required to conduct a virtual assessment from the definition of the models to the simulation-based test;
- a summary of current best practises used to compare ADS virtual and physical test outcomes;
- a description of the analysis performed with the results; and

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<sup>1</sup> It can be a combination of metrics. In addition to the key properties identified during this task, the proposed metric(s) should be directly correlated to safety and be measurable from both physical and virtual ADS testing.

<sup>2</sup> Software-In-the-Loop (SIL), Hardware-In-the-Loop (HIL), Vehicle -In-the-Loop (VIL), Driver-In-the-Loop (DIL)



- a description of the methodology proposed to quantify the discrepancies between the virtual and physical test results.

In addition, the models and simulation results will be submitted as deliverables for this task.

### **Task 3. Qualification of Virtual Test Platforms**

There are several ADS simulation software available today which promise results similar to real-world evaluations. In order to recognize the validity of the results provided by these different options, there is a need to develop a procedure to qualify virtual test platforms for future ADS compliance testing.

Initially, a survey of the different ADS simulation software and platform configurations (e.g. SIL, HIL) currently used by industry (automakers, suppliers, robotics, motorsport), vehicle assessment programs (e.g., NCAP), governments, and research organizations will provide an assessment of the range of different products currently being used. This will be followed by a review of current best practises used to qualify virtual test platforms (software tools) for similar applications.

Based on these findings and the outcomes of Task 2, a draft qualification procedure for virtual test platforms will be developed. The proposed procedure should be complete and include a sufficient selection of representative test scenarios to be statistically significant to confirm the repeatability of the process. Generic models (e.g., vehicle, sensors) must also be included as well as the acceptance criteria based on the key performance indicators identified in Task 2. The draft procedure will then be tested on the contractor's virtual test platform to identify and correct any potential issues. The final version must be aligned with the needs of Transport Canada's self-certification regulatory regime.

The findings of this task will be summarized in a report. The report shall include, as a minimum:

- a list of ADS simulation software and platform configurations currently used by ADS manufacturers and suppliers, research and testing organizations including international regulators conducting research in this area;
- a summary of current best practises used to qualify virtual test platforms;
- a detailed description of the proposed virtual test platform qualification procedure with the results of the evaluation, and the modifications to the draft version.

In addition, the models and simulation results will be submitted as deliverables for this task.

### **Task 4. Elaboration of a Pilot Study**

The virtual test platform qualification procedure developed in Task 3 will have to be tested to demonstrate the feasibility and reproducibility of the approach, and to identify gaps and technical issues. In this final task, the contractor will prepare a comprehensive plan for a future pilot study involving key stakeholders.

The plan shall include all the necessary instructions required to conduct the qualification process for different virtual test platforms, including, but not limited to:

- a list of potential participating organizations;
- detailed descriptions of the test scenarios and data to be provided;
- the necessary equipment;
- step-by-step instructions to conduct the virtual test platform qualification;
- the reporting methods and templates;
- the procedure to analyse and interpret the results;
- the proposed qualification criteria.

The results of this task will be summarized in a report. The report shall include, as a minimum:





- a comprehensive plan for a future pilot study to evaluate the feasibility and reproducibility of the proposed virtual test platform qualification procedure.

## **Deliverables and Acceptance Criteria**

### **Progress Report**

Each month, the contractor will submit to the Project Authority a 1-page progress report briefly describing 1) the work accomplished, 2) the support requirements from the Project Authority, 3) the project schedule, and 4) the financial status. The contractor will be available for meeting (telephone or in-person) on a monthly basis to track progress of this project.

### **Deliverable for Task 1:**

- 1) Task report including but not limited to the following:
  - a) a description of the review methodology used and the resources consulted;
  - b) a list of key metric properties and associated analysis procedure and criteria;
  - c) a list of safety metrics with description and comments; and
  - d) a recommendation (with justifications) for the most important metrics from the perspective of safety for ADS compliance testing.

### **Deliverable for Task 2:**

- 1) Task report including but not limited to the following:
  - a) a description of the different steps required to conduct a virtual assessment from the definition of the models to the simulation-based test;
  - b) a summary of current best practises used to compare ADS virtual and physical test outcomes;
  - c) a description of the analysis performed with the results; and
  - d) a description of the methodology proposed to quantify the discrepancies between the virtual and physical test results.
- 2) Electronic copy of the models, data, and simulation results.

### **Deliverable for Task 3:**

- 1) Task report including, but not limited to the following:
  - a) a list of ADS simulation software and platform configurations currently used by ADS manufacturers and suppliers, research and testing organizations including international regulators conducting research in this area;
  - b) a summary of current best practices used to qualify virtual test platforms;
  - c) a detailed description of the proposed virtual test platform qualification procedure with the results of the evaluation, and the modifications to the draft version.
- 2) Electronic copy of the models, data, and simulation results.

### **Deliverable for Task 4:**

- 1) Pilot study plan including, but not limited to:
  - a) a list of potential participating organizations;
  - b) a detailed descriptions of the test scenarios and data to be provided;
  - c) the necessary equipment;



- d) step-by-step instructions to conduct the virtual test platform qualification;
- e) the reporting methods and templates;
- f) the procedure to analyze and interpret the results;
- g) the proposed qualification criteria.

### **Acceptance Criteria**

All of the material resulting from this project must be prepared in English and provided electronically to Transport Canada. The reports shall be in a format consistent with a high-quality, technical report and must be provided in Microsoft Word (DOCX) format.

The Project Authority will review the accuracy and completeness of the material submitted as deliverables and determine the quality of the submission and if the collection, analysis and interpretation of data / information has been done in such a way as to deem the work acceptable. The Project Authority will have two weeks to review the deliverable and either accept or request changes to any material submitted.

Once a change is requested, the contractor will have two weeks to make appropriate changes and submit the final deliverable for acceptance.

### **Constraints**

#### **Contractor's Responsibilities**

The Contractor is responsible for carrying out all aspects of the project work as herein indicated. The Contractor will perform the work using the Contractor's own information, research, facilities and equipment.

It is the responsibility of the Contractor to facilitate and maintain regular communication with the Department. Communication is defined as all reasonable efforts to inform the Project Authority of plans, decisions, proposed approaches, implementation, and results of work, to ensure that the project is progressing well and in accordance with expectations. Communication may include: phone calls, electronic mail, and meetings. In addition, the Contractor is to immediately notify the Project Authority of any issues, problems, or areas of concern in relation to any work completed under the contract, as they arise.

### **Language of Work**

The language of work is English.

### **Travel and Living**

The Contractor is not required to travel.

### **Replacement of Resources**

The contractor must provide the services of the personnel named in the contract to perform the work, unless the Contractor is unable to do so for reasons beyond his/her control. Should the contractor at any time be unable to provide the services of the resource(s) named in the contract, the contractor shall be responsible for providing replacement personnel, at the same cost, who shall be of similar or greater ability and attainment and whom shall be acceptable to the Transport Canada Project Authority.

In advance of the date upon which replacement resources are to commence work, the contractor shall notify, in writing, to the Transport Canada Project Authority the reason for the unavailability of the



resource(s) named in the contract. The contractor shall then provide to the Transport Canada Project Authority the name(s) of the personnel and an outline of the qualifications and experiences of the proposed replacement(s). Any replacement personnel will be evaluated in the same time. Under no circumstances shall the contractor allow performance of the services by the replacement resources that have not been authorized by the Transport Canada Project Authority.

### Support Provided by Canada

The Transport Canada Project Authority will be responsible for providing, as required, direction and guidance to the Contractor, and accepting and approving Contractor deliverables on behalf of the department. Additionally, as required for the completion of the work, the Project Authority will:

- a) Ensure that appropriate subject matter experts and stakeholders from within the department are available to the Contractor, as required, to provide input, answer questions, evaluate deliverables and participate in meetings;
- b) Provide available references and supporting documentation to the Contractor;
- c) Review and provide comments on draft reports and all submitted deliverables. The Project Authority will provide a written response addressing any issues promptly.

### Timeframe and Delivery Dates

The completion date for the project and submission of all deliverables must be no later than March 31st, 2022.

Required dates for each task deliverable are provided in Table 1.

Table 1. Schedule of deliverables

Task	Deliverable	Required by
1	Task Report 1 – Safety Assessment Metrics	30 June 2021
2	Task Report 2 - Virtual ADS Test Verification Electronic copy of the models, data, and simulation results	30 September 2021
3	Task Report 3 - Virtual Test Platform Qualification Procedure Electronic copy of the models, data, and simulation results	31 December 2021
4	Task Report 4 – Detailed pilot study plan	31 March 2022

### Contractor Qualifications

The Contractor will provide a project team that will be led by a Senior Project Manager and consist at a minimum of the following members and other staff who are required to support their work:

- 1) Project manager;
- 2) Senior engineer with expertise in ADS/ADAS **safety verification**;
- 3) Senior engineer with expertise in ADS/ADAS **performance testing**;
- 4) Software engineer with expertise in **computer simulation** of ADS and/or ADAS.

Each senior engineer resource must have at least a bachelor’s degree in mechanical, electrical, or aerospace engineering or an equivalent. The software engineer must have at least a bachelor’s degree in computer science or an equivalent. The expert in safety verification must have demonstrated experience in validation of hardware and software using automotive industry’s best practices. The expert in performance testing must have demonstrated experience in evaluating ADS/ADAS with accepted test



standards. The expert in computer simulation must have demonstrated experience in modeling ADS/ADAS for simulation-based testing.

Overall, the team also needs to demonstrate an understanding of the regulatory oversight of the Canadian motor vehicle industry including the demonstration of compliance and certification testing. CVs for all personnel should be provided with the proposal.



## **ANNEX “B” to PART 3 OF THE BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

( ) Direct Deposit (Domestic and International);