

**REQUEST FOR INFORMATION FOR**

**Vehicle Platooning**

**ISSUING OFFICE**

**PENNSYLVANIA DEPARTMENT OF TRANSPORTATION  
BUREAU OF OFFICE SERVICES**

**RFI NUMBER**

**3518RFI01**

**DATE OF ISSUANCE**

**February 28, 2019**

**REQUEST FOR INFORMATION**

**FOR**

**Vehicle Platooning**

**TABLE OF CONTENTS**

**CALENDAR OF EVENTS**

**Page 2**

**PART I – GENERAL INFORMATION**

**Page 3 to 7**

**ATTACHMENT A – CPI AND TRADE SECRET FORM**

## CALENDAR OF EVENTS

Activity	Responsibility	Date
Please monitor the eMarketplace website for all communications regarding this RFI.	Responding Entity	<b>On going</b>
<p><b><u>Electronic responses</u></b> may be sent to the Issuing Office via email to <a href="mailto:PDRFPQuestions@pa.gov">PDRFPQuestions@pa.gov</a> no later than the date and time established on this Calendar of Events. The Issuing Office reserves the right to accept untimely submissions.</p> <p><b><u>Paper responses</u></b> may be sent to the Issuing Office by the date and time established on this Calendar of Events:</p> <p>Pennsylvania Department of Transportation            Bureau of Office Services            ATTN: William Gipe, Issuing Officer            400 North Street, 5<sup>th</sup> Floor            Harrisburg, PA 17120</p>	Responding Entity	<p><b>March 21, 2019</b>  <b>10:00 AM</b></p>

## PART I

### GENERAL INFORMATION

#### I-1. Purpose

This Request for Information (“RFI”) provides an opportunity for interested entities (hereinafter “Responding Entities”) to provide input into Pennsylvania’s Vehicle Platooning policy. The purpose of this RFI is to obtain information from Responding Entities to assist The Pennsylvania Department of Transportation’s (PennDOT) understanding of the capabilities of platooning technology to assist with the development of policy.

#### I-2. Issuing Office

PennDOT’s Bureau of Office Services issued this RFI on behalf of the Commonwealth. The sole point of contact in PennDOT for this RFI shall be the Issuing Officer, William Gipe, PennDOT, Bureau of Office Services, Commonwealth Keystone Building, 400 North Street, 5th Floor, Harrisburg, PA 17120-0041, [wgipe@pa.gov](mailto:wgipe@pa.gov). Please refer all inquiries to the Issuing Officer. **ANY QUESTIONS PERTAINING TO THIS RFI SHALL BE DIRECTED IN WRITING TO THE ISSUING OFFICE IDENTIFIED IN THIS SECTION I-2; PHONE CALLS WILL NOT BE ACCEPTED.**

#### I-3. Background

Pennsylvania is a hub of freight activity, with a significant amount of interstate truck traffic using our highway system, specifically along the I-76, I-78, I-80 and I-81 corridors. As a result, freight movement is a significant economic engine for Pennsylvania. However, with the ever-growing expansion of the freight industry in Pennsylvania comes implications to our roadway network including impacts to safety, mobility, and pavement condition. It is the belief of several subject matter experts within PennDOT that the aforementioned impacts may be alleviated through the use of platooning technology.

Truck platooning allows two or more commercial vehicles, using a combination of vehicle-to-vehicle (V2V) communications systems and low level automation to control acceleration and braking, to travel in close proximity. While a human driver requires roughly 1.5 seconds to perceive braking and an additional second for reaction time, vehicles connected in a platoon coordinate almost instantaneously, allowing the vehicles to travel closer together. This closely spaced operation reduces the aerodynamic drag of all the vehicles in the platoon, resulting in significant fuel savings and reduced emissions. In addition, this technology reduces excessive braking, lessening the impacts on pavement and potentially decreasing congestion.

In October 2018, Governor Tom Wolf signed Act 117 of 2018 into law. Act 117 allows for the platooning of two or three buses, military vehicles or motor carriers on limited access highways or interstate highways as permitted by PennDOT and the Pennsylvania Turnpike Commission. Platooning shall be limited to three or less vehicles and restricted. Each vehicle in the platoon shall be marked with an identifier as determined by PennDOT in consultation with the Pennsylvania State Police and the Pennsylvania Turnpike Commission. Prior to operating, a “Plan for General Platoon Operations” shall be submitted to PennDOT for review. Both PennDOT and the Pennsylvania Turnpike Commission have the authority to restrict platooning for operational or safety reasons, including, but not limited to, emergency conditions.

#### **I-4. Objectives**

To assist in the development of Pennsylvania's vehicle platooning policy and corresponding program, PennDOT must:

- Understand the capabilities and limitations of platooning technology;
- Understand the impact to existing infrastructure;
- Understand what should be considered when evaluating a "Plan for General Platoon Operations"; and
- Determine best practices for visually identifying vehicles engaged in platooning operations.

#### **I-5. Addenda to the RFI**

If the Issuing Office deems it necessary to revise any part of this RFI before the response date, the Issuing Office will post an addendum to the DGS website at <http://www.emarketplace.state.pa.us>. It is the Responding Entity's responsibility to periodically check the website for any new information or addenda to the RFI.

#### **I-6. Requirements**

Responding Entities may elect to provide a response either by paper or electronically via email.

**Electronic responses** shall be emailed to [PDRFPQuestions@pa.gov](mailto:PDRFPQuestions@pa.gov) no later than the date and time established on the **Calendar of Events**.

**Paper responses** may be provided but must have a complete and exact copy on a separate Flash Drive in Microsoft Office, Microsoft Office-compatible format or Adobe Acrobat format. Electronic documents are not to be password protected. Responses must be received no later than the date and time established on the **Calendar of Events**.

#### **I-7. Information Handling**

Any information obtained from PennDOT by Responding Entities during the course of this RFI shall be considered confidential and shall not be disseminated nor discussed except as necessary to respond to this RFI or as required by law.

All responses and response deliverables, once submitted to PennDOT, become the property of PennDOT and PennDOT shall have unrestricted authority to reproduce, distribute, and use any submitted report or data designed or developed and delivered to PennDOT as part of the performance of this RFI.

#### **I-8. PennDOT Questions for Responding Entities**

Responding Entities shall develop responses to the following questions. Responses shall be communicated from the Responding Entity's perspective to PennDOT for the purpose of developing policy.

##### **Operations**

1. Describe your organization's level of interest, approach and role in truck platooning and freight-related technologies.
2. How does your organization determine if a roadway is ideal for platooning, and what safety considerations are part of the decisions?
3. Does your organization have operating procedures? If so, please provide them or explain them.

4. Does your organization deploy after-market truck platooning equipment to a fleet of trucks or do the trucks need to be purchased with equipped OEM truck platooning components installed?
  - a. If the equipment components are after-market, what specific, required equipment will need to be installed on the trucks (e.g., disc brakes)?
5. What factors does your organization consider when determining a reasonable distance between vehicles in the platoon?
  - a. Based on current technology, what is a reasonable minimum following distance of vehicles in the platoon?
6. Describe your methodology to ensuring platooning vehicles do not overload/overstress bridges.
7. What negative impacts, if any, may platooning have on infrastructure?
8. What infrastructure improvements, if any, are necessary to better facilitate platooning operations?
9. What type of training does your organization require your drivers to have?
  - a. How often does a driver have remedial training?
10. Is there an indicator to alert the driver when the platoon is engaged?
11. How many hours does your organization allow vehicles to be engaged in the platoon?
12. What mechanisms does your organization have in place to ensure the driver remains engaged?
13. Discuss your cybersecurity measures to reduce exploitable weaknesses and attacks.
14. How does the platooning technology allow for traffic to be able to merge, pass and share the road with the platoon?
15. Does your organization allow for platoons to carry regulated goods or livestock?
16. What are some challenges or constraints associated with your approach to platooning?
17. Please describe your testing procedures, including but not limited to, a description of the frequency of testing to ensure that the platooning equipment is functioning properly.

### **Visual Identifier**

1. Does your organization use a visual identifier on platooning vehicles when being operated on the roadway to clearly inform other motorists and law enforcement that they are platooning vehicles?
  - a. If yes, please describe the visual identifier used, where it is located, who provides the identifier, and how it is obtained.
  - b. If no, please describe your recommendation for a visual identifier including size and placement.
2. Are there any existing visual identifier requirements that Pennsylvania should mirror?

## **I-9. Response Instructions**

Responding Entities shall submit a response to this RFI. Responding Entities may submit additional information that they determine to be relevant.

The issuance of this RFI does not constitute a commitment from PennDOT to issue a future procurement. Submission of a response to this RFI does not guarantee that a Responding Entity will be selected for any subsequent competitive procurement, nor does it preclude any Responding Entity from responding to future procurement opportunities except as prohibited by law. Please note that Responding Entities should seek the advice of counsel, as necessary, and be cognizant of the State Adverse Interest Act, which prohibits recommending the making of a contract and participation in that subsequent contract. 71 P.S. §§ 776.1-776.8.

This RFI shall not constitute nor should it be construed as a solicitation or as an obligation on the part of PennDOT to issue a procurement or award a contract. The Commonwealth shall not pay for the preparation of any response or information submitted to the Commonwealth or for the Commonwealth's use of such information. The Commonwealth may, in its sole discretion, use information provided in response to this RFI; however, the Commonwealth is not obligated to use any information received in response to this RFI.

To the extent that information provided in response to this RFI may be considered as divulging a Responding Entity's intellectual property, including copyrights and trade secrets, or confidential proprietary information ("CPI"), the following shall apply:

- A. Confidential Information. CPI or trade secrets are not necessarily required to be submitted to PennDOT. However, information pertaining to emerging technologies, whether existing intellectual property including trade secrets or CPI, may be beneficial to PennDOT's and the Commonwealth's decision making as its personnel proceed with deliberations for future courses of action. A Responding Entity shall not label entire responses as confidential or proprietary or trade secret protected. Any Responding Entity which determines that it will divulge such information as part of its response should: 1) submit the signed written statement described in Subsection C. below; 2) note the parameters of any CPI or intellectual property (including trade secrets) in its response; and 3) provide a redacted version of its response, which removes only the CPI and trade secrets, for required public disclosure purposes.
- B. Commonwealth Use. All material submitted with the response shall be considered the property of the Commonwealth and may be returned only at the Issuing Office's option. The Commonwealth, including PennDOT, shall have the right to use any or all ideas and concepts that are presented in any response, unless a Responding Entity, as part of its response, affirmatively notes any and all objections in its response regarding confidential information or trade secrets. Notwithstanding any proprietary or copyright notices contained on the face of responses, the Commonwealth shall have the non-exclusive right to reproduce and to distribute responses internally and to comply with public record or other disclosure requirements under the provisions of any Commonwealth or United States statute or regulation, or rule or order of any court of competent jurisdiction.
- C. Public Disclosure. All responses are potentially subject to disclosure in response to a request for public records made under the Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101, et seq. If a proposal submission contains CPI, information protected by intellectual property rights or trade secrets, a signed written statement to this effect shall be provided with the submission in accordance with 65 P.S. § 67.707(b) for the information to be considered exempt under 65 P.S. § 67.708(b)(11) from public records requests under the Right-to-Know Law.

In addition to Sections 707(b) and 708(b)(11) of the Right-to-Know Law, records protected by a privilege, federal or state law or regulations or judicial order or decree are exempt from the

presumption that a record in PennDOT's possession is a "public record." 65 P.S. §§ 67.305 and 67.102. Furthermore, in the event of a conflict between the Right-to-Know Law, 65 P.S. set forth at § 67.3101.1 and the Pennsylvania Uniform Trade Secret Act (PUTSA) set forth at 12 Pa. C.S. §§ 5301 through 5308, PUTSA will control.