

## 115TH CONGRESS 1ST SESSION H.R. 3401

To amend chapter 301 of subtitle VI of title 49, United States Code, to update or provide new motor vehicle safety standards for highly automated vehicles, and for other purposes.

## IN THE HOUSE OF REPRESENTATIVES

July 26, 2017

Ms. Schakowsky (for herself and Mr. Pallone) introduced the following bill; which was referred to the Committee on Energy and Commerce

## A BILL

To amend chapter 301 of subtitle VI of title 49, United States Code, to update or provide new motor vehicle safety standards for highly automated vehicles, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. UPDATED OR NEW MOTOR VEHICLE SAFETY
- 4 STANDARDS FOR HIGHLY AUTOMATED VEHI-
- 5 CLES.
- 6 (a) AMENDMENT.—Chapter 301 of subtitle VI of title
- 7 49, United States Code, is amended by inserting after sec-
- 8 tion 30128 the following new section:

| 1  | "§ 30129. Updated or new motor vehicle safety stand-   |
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| 2  | ards for highly automated vehicles                     |
| 3  | "(a) Safety Assessment Certification.—                 |
| 4  | "(1) Final Rule.—Not later than 24 months              |
| 5  | after the date of the enactment of this section, the   |
| 6  | Secretary of Transportation shall issue a final rule   |
| 7  | requiring the submission of safety assessment certifi- |
| 8  | cations regarding how safety is being addressed by     |
| 9  | each entity developing a highly automated vehicle or   |
| 10 | an automated driving system. Such rule shall in-       |
| 11 | clude—   |
| 12 | "(A) a specification of which entities are             |
| 13 | required to submit such certifications;                |
| 14 | "(B) a clear description of the relevant test          |
| 15 | results, data, and other contents required to be       |
| 16 | submitted by such entity, in order to dem-             |
| 17 | onstrate that such entity's vehicles are likely to     |
| 18 | maintain safety, and function as intended and          |
| 19 | contain fail safe features, to be included in such     |
| 20 | certifications; and                                    |
| 21 | "(C) a specification of the circumstances              |
| 22 | under which such certifications are required to        |
| 23 | be updated or resubmitted.                             |
| 24 | "(2) Interim requirement.—Until the final              |
| 25 | rule issued under paragraph (1) takes effect, safety   |
| 26 | assessment letters shall be submitted to the National  |

| 1  | Highway Traffic Safety Administration as con-         |
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| 2  | templated by the Federal Automated Vehicles Policy    |
| 3  | issued in September 2016, or any successor guid-      |
| 4  | ance issued on highly automated vehicles requiring a  |
| 5  | safety assessment letter.                             |
| 6  | "(3) Periodic Review and Updating.—Not                |
| 7  | later than 5 years after the date on which the final  |
| 8  | rule is issued under paragraph (1), and not less fre- |
| 9  | quently than every 5 years thereafter, the Secretary  |
| 10 | shall—  |
| 11 | "(A) review such rule; and                            |
| 12 | "(B) update such rule if the Secretary con-           |
| 13 | siders it necessary.                                  |
| 14 | "(4) Rules of construction.—                          |
| 15 | "(A) No conditions on deployment.—                    |
| 16 | Nothing in this subsection may be construed to        |
| 17 | limit or affect the Secretary's authority under       |
| 18 | any other provision of law. The Secretary may         |
| 19 | not condition deployment or testing of highly         |
| 20 | automated vehicles on review of safety assess-        |
| 21 | ment certifications.                                  |
| 22 | "(B) No New Authorities.—No new au-                   |
| 23 | thorities are granted to the Secretary under          |
| 24 | this section other than the promulgation of the       |
| 25 | rule pursuant to paragraph (1).                       |

"(b) REVIEW AND RESEARCH.—To accommodate the 1 2 development and deployment of highly automated vehicles 3 and to ensure the safety and security of highly automated 4 vehicles and motor vehicles and others that will share the 5 roads with highly automated vehicles, not later than 180 6 days after the date of the enactment of this section, the 7 Secretary shall— 8 "(1) initiate or continue a review of the Federal 9 motor vehicle safety standards in effect on such date 10 of enactment; and 11 "(2) initiate or continue research regarding new 12 Federal motor vehicle safety standards. 13 "(c) Rulemaking and Safety Priority Plan.— "(1) IN GENERAL.—Not later than 1 year after 14 15 the date of enactment of this section, the Secretary 16 shall make available to the public and submit to the 17 Committee on Energy and Commerce of the House 18 of Representatives and the Committee on Commerce, 19 Science, and Transportation of the Senate a rule-20 making and safety priority plan, as necessary to ac-21 commodate the development and deployment of high-22 ly automated vehicles and to ensure the safety and 23 security of highly automated vehicles and motor ve-24 hicles and others that will share the roads with high-

ly automated vehicles, to—

| 1  | "(A) update the motor vehicle safety              |
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| 2  | standards in effect on such date of enactment;    |
| 3  | "(B) issue new motor vehicle safety stand-        |
| 4  | ards; and   |
| 5  | "(C) consider how objective ranges in per-        |
| 6  | formance standards could be used to test motor    |
| 7  | vehicle safety standards, which safety standards  |
| 8  | would be appropriate for such testing, and        |
| 9  | whether additional authority would facilitate     |
| 10 | such testing.                                     |
| 11 | "(2) Inclusion of Priorities.—                    |
| 12 | "(A) Priorities.—The plan required by             |
| 13 | paragraph (1) shall detail the overall priorities |
| 14 | of the National Highway Traffic Safety Admin-     |
| 15 | istration for the 5 years following the issuance  |
| 16 | of the plan, including both priorities with re-   |
| 17 | spect to highly automated vehicles and priorities |
| 18 | with respect to other safety initiatives of the   |
| 19 | Administration, in order to meet the Nation's     |
| 20 | motor vehicle safety challenges.                  |
| 21 | "(B) Identification of elements that              |
| 22 | MAY REQUIRE STANDARDS.—For highly auto-           |
| 23 | mated vehicles, the National Highway Traffic      |
| 24 | Safety Administration should identify elements    |

that may require performance standards includ-

- ing human machine interface and sensors and actuators, and consider process and procedure standards for software and cybersecurity as necessary.
- 5 "(3) Periodic updating.—The plan required 6 by paragraph (1) shall be updated every 2 years, or 7 more frequently if the Secretary considers it nec-8 essary.
- 9 "(d) Rulemaking Proceedings on Updated or 10 New Motor Vehicle Safety Standards.—
- "(1) IN GENERAL.—Not later than 18 months
  after the date of enactment of this section, the Secretary shall initiate the first rulemaking proceeding
  in accordance with the rulemaking and safety priority plan required by subsection (c).
  - "(2) Prioritization of subsequent pro-CEEDINGS.—The Secretary shall continue initiating rulemaking proceedings in accordance with such plan. The Secretary may change at any time those priorities to address matters the Secretary considers of greater priority. If the Secretary makes such a change, the Secretary shall complete an interim update of the priority plan, make such update available to the public, and submit such update to the Committee on Energy and Commerce of the House of

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| 1  | Representatives and the Committee on Commerce,   |
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| 2  | Science, and Transportation of the Senate.".   |
| 3  | (b) Clerical Amendment.—The analysis for chap-   |
| 4  | ter 301 of subtitle VI of title 49, United States Code, is                             |
| 5  | amended by inserting after the item relating to section                                |
| 6  | 30128 the following new item:  |
|    | "30129. Updated or new motor vehicle safety standards for highly automated vehicles.". |
| 7  | (e) Definitions.—Section 30102 of title 49, United                                     |
| 8  | States Code, is amended—   |
| 9  | (1) in subsection (a)—   |
| 10 | (A) by redesignating paragraphs (1)  |
| 11 | through $(13)$ as paragraphs $(2)$ , $(3)$ , $(4)$ , $(5)$ ,                           |
| 12 | (8), $(9)$ , $(10)$ , $(11)$ , $(12)$ , $(13)$ , $(15)$ , $(16)$ , and                 |
| 13 | (17), respectively;  |
| 14 | (B) by inserting before paragraph (2) (as  |
| 15 | so redesignated) the following:  |
| 16 | "(1) 'automated driving system' means the  |
| 17 | hardware and software that are collectively capable                                    |
| 18 | of performing the entire dynamic driving task on a                                     |
| 19 | sustained basis, regardless of whether such system is                                  |
| 20 | limited to a specific operational design domain.";                                     |
| 21 | (C) by inserting after paragraph (5) (as so  |
| 22 | redesignated) the following:   |
| 23 | "(6) 'dynamic driving task' means all of the   |
| 24 | real time operational and tactical functions required                                  |

| 1  | to operate a vehicle in on-road traffic, excluding the |
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| 2  | strategic functions such as trip scheduling and selec- |
| 3  | tion of destinations and waypoints, and including—     |
| 4  | "(A) lateral vehicle motion control via                |
| 5  | steering;  |
| 6  | "(B) longitudinal vehicle motion control               |
| 7  | via acceleration and deceleration;                     |
| 8  | "(C) monitoring the driving environment                |
| 9  | via object and event detection, recognition, clas-     |
| 10 | sification, and response preparation;                  |
| 11 | "(D) object and event response execution;              |
| 12 | "(E) maneuver planning; and                            |
| 13 | "(F) enhancing conspicuity via lighting,               |
| 14 | signaling, and gesturing.                              |
| 15 | "(7) 'highly automated vehicle'—                       |
| 16 | "(A) means a motor vehicle equipped with               |
| 17 | an automated driving system; and                       |
| 18 | "(B) does not include a commercial motor               |
| 19 | vehicle (as defined in section 31101)."; and           |
| 20 | (D) by inserting after paragraph (13) (as              |
| 21 | so redesignated) the following:                        |
| 22 | "(14) 'operational design domain' means the            |
| 23 | specific conditions under which a given driving auto-  |
| 24 | mation system or feature thereof is designed to func-  |
| 25 | tion."; and  |

1 (2) by adding at the end the following:

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"(c) Revisions to Certain Definitions.—

"(1) If SAE International (or its successor organization) revises the definition of any of the terms defined in paragraph (1), (6), or (14) of subsection (a) in Recommended Practice Report J3016, it shall notify the Secretary of the revision. The Secretary shall publish a notice in the Federal Register to inform the public of the new definition unless, within 90 days after receiving notice of the new definition and after opening a period for public comment on the new definition, the Secretary notifies SAE International (or its successor organization) that the Secretary has determined that the new definition does not meet the need for motor vehicle safety, or is otherwise inconsistent with the purposes of this chapter. If the Secretary so notifies SAE International (or its successor organization), the existing definition in subsection (a) shall remain in effect.

"(2) If the Secretary does not reject a definition revised by SAE International (or its successor organization) as described in paragraph (1), the Secretary shall promptly make any conforming amendments to the regulations and standards of the Secretary that are necessary. The revised definition

- shall apply for purposes of this chapter. The requirements of section 553 of title 5 shall not apply to the making of any such conforming amendments.
- "(3) Pursuant to section 553 of title 5, the Secretary may update any of the definitions in paragraph (1), (6), or (14) of subsection (a) if the Secretary determines that materially changed circumstances regarding highly automated vehicles have impacted motor vehicle safety such that the definitions need to be updated to reflect such circumstances.".

## 12 SEC. 2. HEADLAMPS.

- 13 (a) SAFETY RESEARCH INITIATIVE.—Not later than
  14 2 years after the date of enactment of this Act, the Sec15 retary of Transportation shall complete research into the
  16 development of updated motor vehicle safety standards or
  17 performance requirements for motor vehicle headlamps
  18 that would improve the performance of headlamps and im19 prove overall safety.
- 20 (b) Rulemaking or Report.—
- 21 (1) RULEMAKING.—After the completion of the 22 research required by subsection (a), the Secretary 23 shall initiate a rulemaking proceeding to revise the 24 motor vehicle safety standards regarding headlamps 25 if the Secretary determines that a revision of the

standards meets the requirements and considerations set forth in subsections (a) and (b) of section 3 30111 of title 49, United States Code.

(2) Report.—If the Secretary determines that a revision to the standard described in paragraph (1) does not meet the requirements and considerations set forth in such subsections, the Secretary shall submit a report describing the reasons for not revising the standard to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

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