

115TH CONGRESS
1ST SESSION

H. R. 3407

To amend chapter 301 of subtitle VI of title 49, United States Code, to require a cybersecurity plan for highly automated vehicles, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 26, 2017

Mr. KINZINGER (for himself and Ms. CLARKE of New York) 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 require a cybersecurity plan 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. CYBERSECURITY OF AUTOMATED DRIVING SYS-**
4 **TEMS.**

5 (a) IN GENERAL.—Chapter 301 of subtitle VI of title
6 49, United States Code, is amended by inserting after sec-
7 tion 30129 (as added by section 4) the following new sec-
8 tion:

1 **“§ 30130. Cybersecurity of automated driving systems**

2 “(a) CYBERSECURITY PLAN.—A manufacturer may
3 not sell, offer for sale, introduce or deliver for introduction
4 into commerce, or import into the United States, any high-
5 ly automated vehicle, vehicle that performs partial driving
6 automation, or automated driving system unless such
7 manufacturer has developed a cybersecurity plan that in-
8 cludes the following:

9 “(1) A written cybersecurity policy with respect
10 to the practices of the manufacturer for detecting
11 and responding to cyber attacks, unauthorized intru-
12 sions, and false and spurious messages or vehicle
13 control commands. This policy shall include—

14 “(A) a process for identifying, assessing,
15 and mitigating reasonably foreseeable
16 vulnerabilities from cyber attacks or unauthor-
17 ized intrusions, including false and spurious
18 messages and malicious vehicle control com-
19 mands; and

20 “(B) a process for taking preventive and
21 corrective action to mitigate against
22 vulnerabilities in a highly automated vehicle or
23 a vehicle that performs partial driving automa-
24 tion, including incident response plans, intru-
25 sion detection and prevention systems that safe-
26 guard key controls, systems, and procedures

1 through testing or monitoring, and updates to
 2 such process based on changed circumstances.

3 “(2) The identification of an officer or other in-
 4 dividual of the manufacturer as the point of contact
 5 with responsibility for the management of cybersecu-
 6 rity.

7 “(3) A process for limiting access to automated
 8 driving systems.

9 “(4) A process for employee training and super-
 10 vision for implementation and maintenance of the
 11 policies and procedures required by this section, in-
 12 cluding controls on employee access to automated
 13 driving systems.

14 “(b) EFFECTIVE DATE.—This section shall take ef-
 15 fect 180 days after the date of enactment of this section.”.

16 (b) ENFORCEMENT AUTHORITY.—Section
 17 30165(a)(1) of title 49, United States Code, is amended
 18 by inserting “30130,” after “30127,”.

19 (c) CLERICAL AMENDMENT.—The analysis for chap-
 20 ter 301 of subtitle VI of title 49, United States Code, is
 21 amended by inserting after the item relating to section
 22 30129 (as added by section 4) the following new item:

“30130. Cybersecurity of automated driving systems.”.

23 (d) DEFINITIONS.—Section 30102 of title 49, United
 24 States Code, is amended—

25 (1) in subsection (a)—

1 (A) by redesignating paragraphs (1)
2 through (13) as paragraphs (2), (3), (4), (5),
3 (8), (9), (10), (11), (12), (13), (15), (16), and
4 (17), respectively;

5 (B) by inserting before paragraph (2) (as
6 so redesignated) the following:

7 “(1) ‘automated driving system’ means the
8 hardware and software that are collectively capable
9 of performing the entire dynamic driving task on a
10 sustained basis, regardless of whether such system is
11 limited to a specific operational design domain.”;

12 (C) by inserting after paragraph (5) (as so
13 redesignated) the following:

14 “(6) ‘dynamic driving task’ means all of the
15 real time operational and tactical functions required
16 to operate a vehicle in on-road traffic, excluding the
17 strategic functions such as trip scheduling and selec-
18 tion of destinations and waypoints, and including—

19 “(A) lateral vehicle motion control via
20 steering;

21 “(B) longitudinal vehicle motion control
22 via acceleration and deceleration;

23 “(C) monitoring the driving environment
24 via object and event detection, recognition, clas-
25 sification, and response preparation;

1 “(D) object and event response execution;

2 “(E) maneuver planning; and

3 “(F) enhancing conspicuity via lighting,
4 signaling, and gesturing.

5 “(7) ‘highly automated vehicle’—

6 “(A) means a motor vehicle equipped with
7 an automated driving system; and

8 “(B) does not include a commercial motor
9 vehicle (as defined in section 31101).”;

10 (D) by inserting after paragraph (13) (as
11 so redesignated) the following:

12 “(14) ‘operational design domain’ means the
13 specific conditions under which a given driving auto-
14 mation system or feature thereof is designed to func-
15 tion.”; and

16 (E) by adding at the end the following:

17 “(18) ‘vehicle that performs partial driving au-
18 tomation’ does not include a commercial motor vehi-
19 cle (as defined in section 31101).”; and

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

21 “(c) REVISIONS TO CERTAIN DEFINITIONS.—

22 “(1) If SAE International (or its successor or-
23 ganization) revises the definition of any of the terms
24 defined in paragraph (1), (6), or (14) of subsection
25 (a) in Recommended Practice Report J3016, it shall

1 notify the Secretary of the revision. The Secretary
2 shall publish a notice in the Federal Register to in-
3 form the public of the new definition unless, within
4 90 days after receiving notice of the new definition
5 and after opening a period for public comment on
6 the new definition, the Secretary notifies SAE Inter-
7 national (or its successor organization) that the Sec-
8 retary has determined that the new definition does
9 not meet the need for motor vehicle safety, or is oth-
10 otherwise inconsistent with the purposes of this chapter.
11 If the Secretary so notifies SAE International (or its
12 successor organization), the existing definition in
13 subsection (a) shall remain in effect.

14 “(2) If the Secretary does not reject a defini-
15 tion revised by SAE International (or its successor
16 organization) as described in paragraph (1), the Sec-
17 retary shall promptly make any conforming amend-
18 ments to the regulations and standards of the Sec-
19 retary that are necessary. The revised definition
20 shall apply for purposes of this chapter. The require-
21 ments of section 553 of title 5 shall not apply to the
22 making of any such conforming amendments.

23 “(3) Pursuant to section 553 of title 5, the Sec-
24 retary may update any of the definitions in para-
25 graph (1), (6), or (14) of subsection (a) if the Sec-

1 retary determines that materially changed cir-
2 cumstances regarding highly automated vehicles
3 have impacted motor vehicle safety such that the
4 definitions need to be updated to reflect such cir-
5 cumstances.”.

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