

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: In the nature of a substitute.

**IN THE SENATE OF THE UNITED STATES—117th Cong., 2d Sess.**

**S. 3511**

To require a report on Federal support to the cybersecurity of commercial satellite systems, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. PETERS

Viz:

1 Strike all after the enacting clause and insert the following:  
2

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Satellite Cybersecurity  
5 Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) **COMMERCIAL SATELLITE SYSTEM.**—The  
9 term “commercial satellite system” means an earth  
10 satellite owned and operated by a non-Federal enti-  
11 ty.

1           (2) CRITICAL INFRASTRUCTURE.—The term  
2           “critical infrastructure” has the meaning given the  
3           term in subsection (e) of the Critical Infrastructure  
4           Protection Act of 2001 (42 U.S.C. 5195c(e)).

5           (3) CYBERSECURITY RISK.—The term “cyberse-  
6           curity risk” has the meaning given the term in sec-  
7           tion 2209 of the Homeland Security Act of 2002 (6  
8           U.S.C. 659).

9           (4) CYBERSECURITY THREAT.—The term “cy-  
10          bersecurity threat” has the meaning given the term  
11          in section 102 of the Cybersecurity Information  
12          Sharing Act of 2015 (6 U.S.C. 1501).

13 **SEC. 3. REPORT ON COMMERCIAL SATELLITE CYBERSECU-**  
14 **RITY.**

15          (a) STUDY.—The Comptroller General of the United  
16 States shall conduct a study on the actions the Federal  
17 Government has taken to support the cybersecurity of  
18 commercial satellite systems, including as part of any ac-  
19 tion to address the cybersecurity of critical infrastructure  
20 sectors.

21          (b) REPORT.—Not later than 2 years after the date  
22 of enactment of this Act, the Comptroller General of the  
23 United States shall report to Congress on the study con-  
24 ducted under subsection (a), which shall include informa-  
25 tion on—

1           (1) the effectiveness of efforts of the Federal  
2           Government in improving the cybersecurity of com-  
3           mercial satellite systems;

4           (2) the resources made available to the public,  
5           as of the date of enactment of this Act, by Federal  
6           agencies to address cybersecurity risks and threats  
7           to commercial satellite systems;

8           (3) the extent to which commercial satellite sys-  
9           tems are reliant on or are relied on by critical infra-  
10          structure and an analysis of how commercial sat-  
11          ellite systems, and the threats to such systems, are  
12          integrated into Federal and non-Federal critical in-  
13          frastructure risk analyses and protection plans;

14          (4) the extent to which Federal agencies are re-  
15          liant on commercial satellite systems and how Fed-  
16          eral agencies mitigate cybersecurity risks associated  
17          with those systems; and

18          (5) the extent to which Federal agencies coordi-  
19          nate or duplicate authorities and take other actions  
20          focused on the cybersecurity of commercial satellite  
21          systems.

22          (c) CONSULTATION.—In carrying out subsections (a)  
23          and (b), the Comptroller General of the United States  
24          shall coordinate with appropriate Federal agencies, includ-  
25          ing—

- 1 (1) the Department of Homeland Security;
- 2 (2) the Department of Commerce;
- 3 (3) the Department of Defense;
- 4 (4) the Department of Transportation;
- 5 (5) the Federal Communications Commission;
- 6 (6) the National Aeronautics and Space Admin-  
7 istration; and
- 8 (7) the National Executive Committee for  
9 Space-Based Positioning, Navigation, and Timing.

10 (d) BRIEFING.—Not later than 1 year after the date  
11 of enactment of this Act, the Comptroller General of the  
12 United States shall provide a briefing to the appropriate  
13 congressional committees.

14 (e) CLASSIFICATION.—The report made under sub-  
15 section (b) shall be unclassified but may include a classi-  
16 fied annex.

17 **SEC. 4. RESPONSIBILITIES OF THE CYBERSECURITY AND**  
18 **INFRASTRUCTURE SECURITY AGENCY.**

19 (a) DEFINITIONS.—In this section:

20 (1) CLEARINGHOUSE.—The term “clearing-  
21 house” means the commercial satellite system cyber-  
22 security clearinghouse required to be developed and  
23 maintained under subsection (b)(1).

1           (2) DIRECTOR.—The term “Director” means  
2           the Director of the Cybersecurity and Infrastructure  
3           Security Agency.

4           (3) SMALL BUSINESS CONCERN.—The term  
5           “small business concern” has the meaning given the  
6           term in section 3 of the Small Business Act (15  
7           U.S.C. 632).

8           (b) ESTABLISHMENT OF COMMERCIAL SATELLITE  
9           SYSTEM CYBERSECURITY CLEARINGHOUSE.—

10           (1) IN GENERAL.—Not later than 180 days  
11           after the date of enactment of this Act, the Director  
12           shall develop and maintain a commercial satellite  
13           system cybersecurity clearinghouse.

14           (2) REQUIREMENTS.—The clearinghouse  
15           shall—

16                   (A) be publicly available online;

17                   (B) contain publicly available commercial  
18                   satellite system cybersecurity resources, includ-  
19                   ing the recommendations consolidated under  
20                   subsection (c)(1), and any other appropriate  
21                   materials for reference by entities that develop  
22                   commercial satellite systems; and

23                   (C) include materials specifically aimed at  
24                   assisting small business concerns with the se-

1           cure development, operation, and maintenance  
2           of commercial satellite systems.

3           (3) CONTENT MAINTENANCE.—The Director  
4           shall maintain current and relevant cybersecurity in-  
5           formation on the clearinghouse.

6           (4) EXISTING PLATFORM OR WEBSITE.—The  
7           Director may establish and maintain the clearing-  
8           house on an online platform or a website that is in  
9           existence as of the date of enactment of this Act.

10          (c) CONSOLIDATION OF COMMERCIAL SATELLITE  
11 SYSTEM CYBERSECURITY RECOMMENDATIONS.—

12           (1) IN GENERAL.—The Director shall consoli-  
13           date voluntary cybersecurity recommendations de-  
14           signed to assist in the development, maintenance,  
15           and operation of commercial satellite systems.

16           (2) REQUIREMENTS.—The recommendations  
17           consolidated under paragraph (1) shall include, to  
18           the greatest extent practicable, materials addressing  
19           the following:

20                   (A) Risk-based, cybersecurity-informed en-  
21                   gineering, including continuous monitoring and  
22                   resiliency.

23                   (B) Planning for retention or recovery of  
24                   positive control of commercial satellite systems  
25                   in the event of a cybersecurity incident.

1 (C) Protection against unauthorized access  
2 to vital commercial satellite system functions.

3 (D) Physical protection measures designed  
4 to reduce the vulnerabilities of a commercial  
5 satellite system's command, control, and telem-  
6 etry receiver systems.

7 (E) Protection against jamming and spoof-  
8 ing.

9 (F) Security against threats throughout a  
10 commercial satellite system's mission lifetime.

11 (G) Management of supply chain risks that  
12 affect cybersecurity of commercial satellite sys-  
13 tems.

14 (H) As appropriate, and as applicable pur-  
15 suant to the maintenance requirement under  
16 subsection (b)(3), the findings and rec-  
17 ommendations from the study conducted by the  
18 Comptroller General of the United States under  
19 section 3(a).

20 (I) Any other recommendations to ensure  
21 the confidentiality, availability, and integrity of  
22 data residing on or in transit through commer-  
23 cial satellite systems.

24 (d) IMPLEMENTATION.—In implementing this Act,  
25 the Director shall—

1           (1) to the extent practicable, carry out the im-  
2           plementation as a public-private partnership;

3           (2) coordinate with the heads of appropriate  
4           Federal agencies with expertise and experience in  
5           satellite operations, including the entities described  
6           in section 3(e); and

7           (3) consult with non-Federal entities developing  
8           commercial satellite systems or otherwise supporting  
9           the cybersecurity of commercial satellite systems, in-  
10          cluding private, consensus organizations that develop  
11          relevant standards.