

118TH CONGRESS  
2D SESSION

# S. 5407

To require the Secretary of Homeland Security to develop a plan to identify, integrate, and deploy new, innovative, disruptive, or other emerging or advanced technologies that are safe and secure to enhance U.S. Customs and Border Protection’s capabilities to meet its mission needs along international borders and at ports of entry.

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## IN THE SENATE OF THE UNITED STATES

DECEMBER 2, 2024

Ms. CORTEZ MASTO introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

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## A BILL

To require the Secretary of Homeland Security to develop a plan to identify, integrate, and deploy new, innovative, disruptive, or other emerging or advanced technologies that are safe and secure to enhance U.S. Customs and Border Protection’s capabilities to meet its mission needs along international borders and at ports of entry.

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. SHORT TITLE.**

4 This Act may be cited as the “Emerging Innovative  
5 Border Technologies Act”.

1 **SEC. 2. INNOVATIVE AND EMERGING BORDER TECH-**  
2 **NOLOGY PLAN.**

3 (a) IN GENERAL.—Not later than 180 days after the  
4 date of the enactment of this Act, the Secretary of Home-  
5 land Security, acting through the Commissioner for U.S.  
6 Customs and Border Protection (referred to in this section  
7 as “CBP”) and the Under Secretary for Science and  
8 Technology of the Department of Homeland Security, in  
9 consultation with the Department’s Chief Information Of-  
10 ficer, Chief Procurement Officer, Privacy Officer, Civil  
11 Right and Civil Liberties Officer, General Counsel, and  
12 any other relevant offices and components of the Depart-  
13 ment of Homeland Security, shall submit a plan to the  
14 Committee on Homeland Security and Governmental Af-  
15 fairs of the Senate and the Committee on Homeland Secu-  
16 rity of the House of Representatives for identifying, inte-  
17 grating, and deploying new, innovative, disruptive, or  
18 other emerging or advanced technologies that are safe and  
19 secure to enhance CBP capabilities to meet its mission  
20 needs along international borders or at ports of entry.

21 (b) CONTENTS.—The plan required under subsection

22 (a) shall include—

23 (1) information regarding how CBP utilizes the  
24 CBP Innovation Team authority under subsection  
25 (c) and other mechanisms to carry out the purposes  
26 described in subsection (a);

1           (2) an assessment of the contributions directly  
2           attributable to such utilization;

3           (3) information regarding—

4                 (A) the composition of each CBP Innova-  
5           tion Team; and

6                 (B) how each CBP Innovation Team co-  
7           ordinates and integrates efforts with the CBP  
8           acquisition program office and other partners  
9           within CBP and the Department of Homeland  
10          Security;

11          (4) the identification of technologies used by  
12          other Federal departments or agencies not in use by  
13          CBP that could assist in enhancing mission needs  
14          along international borders or at ports of entry;

15          (5) an analysis of authorities available to CBP  
16          to procure technologies referred to in subsection (a);

17          (6) an assessment of whether additional or al-  
18          ternative authorities are needed to carry out the  
19          purposes described in subsection (a);

20          (7) an explanation of how CBP plans to scale  
21          existing programs related to emerging or advanced  
22          technologies that are safe and secure into programs  
23          of record;

1           (8) a description of each planned security-re-  
2           lated technology program, including objectives, goals,  
3           and timelines for each such program;

4           (9) an assessment of the potential privacy, civil  
5           rights, civil liberties, and safety impacts of these  
6           technologies on individuals, and potential mitigation  
7           measures;

8           (10) an assessment of CBP legacy border tech-  
9           nology programs that could be phased out and re-  
10          placed with technologies referred to in subsection  
11          (a), including cost estimates relating to such phase  
12          out and replacement;

13          (11) information relating to how CBP is coordi-  
14          nating with the Department of Homeland Security's  
15          Science and Technology Directorate—

16                 (A) to research and develop new, innova-  
17                 tive, disruptive, or other emerging or advanced  
18                 technologies that are safe and secure to carry  
19                 out the purposes described in subsection (a);

20                 (B) to identify new, innovative, disruptive,  
21                 or other emerging or advanced technologies that  
22                 are safe and secure and that are in development  
23                 or have been deployed by the private and public  
24                 sectors and may satisfy the mission needs of  
25                 CBP, with or without adaptation;

1 (C) to incentivize the private sector to de-  
2 velop technologies, including privacy enhancing  
3 technologies, that may help CBP meet mission  
4 needs to enhance, or address capability gaps in,  
5 border security operations; and

6 (D) to identify and assess ways to increase  
7 opportunities for communication and collabora-  
8 tion with the private sector, small, and dis-  
9 advantaged businesses, intra-governmental enti-  
10 ties, university centers of excellence, and Fed-  
11 eral laboratories to leverage emerging tech-  
12 nology and research within the public and pri-  
13 vate sectors;

14 (12) information relating to CBP's coordination  
15 with the Department of Homeland Security official  
16 responsible for artificial intelligence policy to ensure  
17 the plan complies with the Department's policies and  
18 measures promoting responsible use of artificial in-  
19 telligence;

20 (13) information regarding metrics and key  
21 performance parameters for evaluating the effective-  
22 ness of efforts to identify, integrate, and deploy new,  
23 innovative, disruptive, or other emerging or ad-  
24 vanced technologies that are safe and secure to carry  
25 out the purposes described in subsection (a);

1           (14) the identification of recent technological  
2           advancements relating to—

3                   (A) manned aircraft sensor, communica-  
4                   tion, and common operating picture technology;

5                   (B) unmanned aerial systems and related  
6                   technology, including counter-unmanned aerial  
7                   system technology;

8                   (C) surveillance technology, including—

9                           (i) mobile surveillance vehicles;

10                           (ii) associated electronics, including  
11                           cameras, sensor technology, and radar;

12                           (iii) tower-based surveillance tech-  
13                           nology;

14                           (iv) advanced unattended surveillance  
15                           sensors; and

16                           (v) deployable, lighter-than-air,  
17                           ground surveillance equipment;

18                   (D) nonintrusive inspection technology, in-  
19                   cluding non-X-ray devices utilizing muon to-  
20                   mography and other advanced detection tech-  
21                   nology;

22                   (E) tunnel detection technology; and

23                   (F) communications equipment, includ-  
24                   ing—

25                           (i) radios;

1 (ii) long-term evolution broadband;

2 and

3 (iii) miniature satellites;

4 (15) information relating to how CBP is coordi-  
5 nating with the Department of Homeland Security's  
6 Chief Information Officer, Chief Technology Officer,  
7 Privacy Officer, Civil Rights and Civil Liberties Offi-  
8 cer, General Counsel, and other relevant offices and  
9 components of the Department in researching, devel-  
10 oping, acquiring, or scaling new, innovative, disrupt-  
11 tive, or other emerging or advanced technologies  
12 that are safe and secure; and

13 (16) any other information the Secretary deter-  
14 mines to be relevant.

15 (c) CBP INNOVATION TEAM AUTHORITY.—

16 (1) IN GENERAL.—The Commissioner for CBP  
17 is authorized to maintain 1 or more CBP Innovation  
18 Teams to research and adapt commercial tech-  
19 nologies that are new, innovative, disruptive, privacy  
20 enhancing, or otherwise emerging or advanced and  
21 may be used by CBP—

22 (A) to enhance mission needs along inter-  
23 national borders and at ports of entry; and

24 (B) to assess potential outcomes, including  
25 any negative consequences, of the introduction

1 of emerging or advanced technologies with re-  
2 spect to which documented capability gaps in  
3 border security operations are yet to be deter-  
4 mined.

5 (2) FUNCTIONS.—Each CBP Innovation Team  
6 shall—

7 (A) operate consistent with the Depart-  
8 ment of Homeland Security’s and CBP’s—

9 (i) procurement and acquisition man-  
10 agement policy; and

11 (ii) policies pertaining to responsible  
12 use of artificial intelligence; and

13 (B) consult with the Officer for Civil  
14 Rights and Civil Liberties and the Privacy Offi-  
15 cer of the Department of Homeland Security to  
16 ensure programs, policies, and procedures in-  
17 volving civil rights, civil liberties, and privacy  
18 considerations are addressed in an integrated  
19 and comprehensive manner.

20 (3) OPERATING PROCEDURES, PLANNING, STRA-  
21 TEGIC GOALS.—The Commissioner for CBP shall re-  
22 quire each CBP Innovation Team maintained pursu-  
23 ant to paragraph (1) to establish, in coordination  
24 with other appropriate offices of the Department of  
25 Homeland Security—



1 (A) operating procedures, which shall in-  
2 clude—

3 (i) specificity regarding roles and re-  
4 sponsibilities within each such team and  
5 with respect to Department of Homeland  
6 Security and non-Federal partners; and

7 (ii) protocols for entering into agree-  
8 ments to rapidly transition such tech-  
9 nologies to existing or new programs of  
10 record to carry out the purposes described  
11 in subsection (a);

12 (B) planning and strategic goals for each  
13 such team that includes projected costs, time  
14 frames, metrics, and key performance param-  
15 eters relating to the achievement of identified  
16 strategic goals, including a metric to measure  
17 the rate at which technologies described in sub-  
18 section (a) are transitioned to existing or new  
19 programs of record in accordance with subpara-  
20 graph (A); and

21 (C) operating procedures that ensure each  
22 such team is in compliance with all applicable  
23 laws, rules, and regulations and with the De-  
24 partment of Homeland Security's policies per-  
25 taining to procurement and acquisition manage-

1           ment, privacy, civil rights and civil liberties, and  
2           the responsible use of artificial intelligence, in-  
3           cluding risk assessments and ongoing moni-  
4           toring to ensure accuracy and reliability.

5           (4) ANNUAL REPORT.—Not later than 180 days  
6           after the date of the enactment of this Act and an-  
7           nually thereafter, the Commissioner for CBP shall  
8           submit to the Committee on Homeland Security and  
9           Governmental Affairs of the Senate and the Com-  
10          mittee on Homeland Security of the House of Rep-  
11          resentatives information relating to the activities of  
12          CBP Innovation Teams, including—

13                 (A) copies of operating procedures and  
14                 protocols required under paragraph (2)(A) and  
15                 planning and strategic goals required under  
16                 paragraph (2)(B);

17                 (B) descriptions of the technologies piloted  
18                 by each such team during the immediately pre-  
19                 ceding fiscal year, including—

20                         (i) information regarding which such  
21                         technologies are determined to have been  
22                         successful; and

23                         (ii) the identification of documented  
24                         capability gaps that are being addressed;  
25                         and

1                   (C) information regarding the status of ef-  
2                   forts to rapidly transition technologies deter-  
3                   mined successful to existing or new programs of  
4                   record.

5           (d) COST-BENEFIT.—Before initiating the large-scale  
6 deployment of any new technology contained in the plan  
7 required under subsection (a), the Secretary of Homeland  
8 Security shall consider the costs and benefits to the Gov-  
9 ernment to ensure that the deployment of such technology  
10 will provide quantifiable improvements to border security.

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