

Calendar No. 754

118TH CONGRESS
2D SESSION

H. R. 7832

[Report No. 118–334]

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 24, 2024

Received; read twice and referred to the Committee on Homeland Security and
Governmental Affairs

DECEMBER 19 (legislative day, DECEMBER 16), 2024

Reported by Mr. PETERS, with an amendment and an amendment to the title

[Strike out all after the enacting clause and insert the part printed in *italic*]

AN ACT

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
to enhance, or address capability gaps in, border security
operations, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Emerging Innovative
3 Border Technologies Act”.

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

6 (a) **IN GENERAL.**—Not later than 180 days after the
7 date of the enactment of this Act, the Secretary of Home-
8 land Security, acting through the Commissioner of U.S.
9 Customs and Border Protection (CBP) and the Under
10 Secretary for Science and Technology of the Department
11 of Homeland Security, shall submit to the Committee on
12 Homeland Security of the House of Representatives and
13 the Committee on Homeland Security and Governmental
14 Affairs of the Senate a plan to identify, integrate, and de-
15 ploy new, innovative, disruptive, or other emerging or ad-
16 vanced technologies that may incorporate artificial intel-
17 ligence, machine-learning, automation, fiber-optic sensing
18 technology, nanotechnology, optical and cognitive radar,
19 modeling and simulation technology, hyperspectral and
20 LIDAR sensors, imaging, identification, and categoriza-
21 tion systems, or other emerging or advanced technologies,
22 to enhance, or address capability gaps in, border security
23 operations.

24 (b) **CONTENTS.**—The plan required under subsection
25 (a) shall include the following:

1 (1) Information regarding how CBP utilizes
2 CBP Innovation Team authority under subsection
3 (c) and other mechanisms to carry out the purposes
4 specified in subsection (a).

5 (2) An assessment of the contributions directly
6 attributable to such utilization.

7 (3) Information regarding the composition of
8 each CBP Innovation Team, and how each such
9 Team coordinates and integrates efforts with the
10 CBP acquisition program office and other partners
11 within CBP and the Department of Homeland Secu-
12 rity.

13 (4) Identification of technologies used by other
14 Federal departments or agencies not in use by CBP
15 that could assist in enhancing, or addressing capa-
16 bility gaps in, border security operations.

17 (5) An analysis of authorities available to CBP
18 to procure technologies referred to subsection (a),
19 and an assessment as to whether additional or alter-
20 native authorities are needed to carry out the pur-
21 poses specified in such subsection.

22 (6) An explanation of how CBP plans to scale
23 existing programs related to emerging or advanced
24 technologies into programs of record.

1 (7) A description of each planned security-re-
2 lated technology program, including objectives, goals,
3 and timelines for each such program.

4 (8) An assessment of the privacy and security
5 impact on border communities of security-related
6 technology.

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

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

15 (A) research and develop new, innovative,
16 disruptive, or other emerging or advanced tech-
17 nologies to carry out the purposes specified in
18 subsection (a);

19 (B) identify security-related technologies
20 that are in development or deployed by the pri-
21 vate and public sectors that may satisfy the
22 mission needs of CBP, with or without adapta-
23 tion;

24 (C) incentivize the private sector to develop
25 technologies that may help CBP meet mission

needs to enhance, or address capability gaps in;
border security operations; and

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

(11) Information on metrics and key perform-
ance parameters for evaluating the effectiveness of
efforts to identify, integrate, and deploy new, inno-
vative, disruptive, or other emerging or advanced
technologies to carry out the purposes specified in
subsection (a).

(12) An identification of recent technological
advancements in the following:

(A) Manned aircraft sensor, communica-
tion, and common operating picture technology.

(B) Unmanned aerial systems and related
technology, including counter-unmanned aerial
system technology.

(C) Surveillance technology, including the
following:

1 (i) Mobile surveillance vehicles.

2 (ii) Associated electronics, including
3 cameras, sensor technology, and radar.

4 (iii) Tower-based surveillance tech-
5 nology.

6 (iv) Advanced unattended surveillance
7 sensors.

8 (v) Deployable, lighter-than-air,
9 ground surveillance equipment.

10 (D) Nonintrusive inspection technology, in-
11 cluding non-X-ray devices utilizing muon to-
12 mography and other advanced detection tech-
13 nology.

14 (E) Tunnel detection technology.

15 (F) Communications equipment, including
16 the following:

17 (i) Radios.

18 (ii) Long-term evolution broadband.

19 (iii) Miniature satellites.

20 (13) Any other information the Secretary deter-
21 mines relevant.

22 (c) CBP INNOVATION TEAM AUTHORITY.—

23 (1) IN GENERAL.—The Commissioner of CBP
24 is authorized to maintain one or more CBP Innova-
25 tion Teams to research and adapt commercial tech-

1 nologies that are new, innovative, disruptive, or oth-
2 erwise emerging or advanced that may be used by
3 CBP to enhance, or address capability gaps in bor-
4 der security operations and urgent mission needs;
5 and assess potential outcomes, to include any nega-
6 tive consequences, of the introduction of emerging or
7 advanced technologies with respect to which docu-
8 mented capability gaps in border security operations
9 are yet to be determined.

10 (2) OPERATING PROCEDURES, PLANNING, STRA-
11 TEGIC GOALS.—The Commissioner of CBP shall re-
12 quire each team maintained pursuant to paragraph
13 (1) to establish the following:

14 (A) Operating procedures that include
15 specificity regarding roles and responsibilities
16 within each such team and with respect to De-
17 partment of Homeland Security and non-Fed-
18 eral partners; and protocols for entering into
19 agreements to rapidly transition such tech-
20 nologies to existing or new programs of record
21 to carry out the purposes specified in subsection
22 (a).

23 (B) Planning and strategic goals for each
24 such team that includes projected costs, time
25 frames, metrics, and key performance param-

eters relating to the achievement of identified strategic goals, including a metric to measure the rate at which technologies described in subsection (a) are transitioned to existing or new programs of record in accordance with subparagraph (A)

(3) REPORTING.—Not later than 180 days after the date of the enactment of this Act and annually thereafter, the Commissioner of CBP shall submit to the Committee on Homeland Security of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate information relating to the activities CBP Innovation Teams, including information regarding the following:

(A) Copies of operating procedures and protocols under paragraph (2)(A) and planning and strategic goals required under paragraph (2)(B).

(B) Descriptions of the technologies piloted by each such team over the immediately preceding fiscal year, including information regarding which such technologies are determined successful and an identification of documented capability gaps that are addressed.

1 ~~(C) Information on the status of efforts to~~
 2 ~~rapidly transition technologies determined suc-~~
 3 ~~cessful to existing or new programs of record.~~

4 **SECTION 1. SHORT TITLE.**

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

7 **SEC. 2. INNOVATIVE AND EMERGING BORDER TECHNOLOGY**
 8 **PLAN.**

9 (a) *IN GENERAL.*—Not later than 180 days after the
 10 *date of the enactment of this Act, the Secretary of Homeland*
 11 *Security, acting through the Commissioner for U.S. Cus-*
 12 *toms and Border Protection (referred to in this section as*
 13 *“CBP”) and the Under Secretary for Science and Tech-*
 14 *nology of the Department of Homeland Security, in con-*
 15 *sultation with the Department’s Chief Information Officer,*
 16 *Chief Procurement Officer, Privacy Officer, Civil Right and*
 17 *Civil Liberties Officer, General Counsel, and any other rel-*
 18 *evant offices and components of the Department of Home-*
 19 *land Security, shall submit a plan to the Committee on*
 20 *Homeland Security and Governmental Affairs of the Senate*
 21 *and the Committee on Homeland Security of the House of*
 22 *Representatives for identifying, integrating, and deploying*
 23 *new, innovative, disruptive, or other emerging or advanced*
 24 *technologies that are safe and secure to enhance CBP capa-*

1 *bilities to meet its mission needs along international bor-*
 2 *ders or at ports of entry.*

3 *(b) CONTENTS.—The plan required under subsection*
 4 *(a) shall include—*

5 *(1) information regarding how CBP utilizes the*
 6 *CBP Innovation Team authority under subsection (c)*
 7 *and other mechanisms to carry out the purposes de-*
 8 *scribed in subsection (a);*

9 *(2) an assessment of the contributions directly*
 10 *attributable to such utilization;*

11 *(3) information regarding—*

12 *(A) the composition of each CBP Innova-*
 13 *tion Team; and*

14 *(B) how each CBP Innovation Team coordi-*
 15 *nates and integrates efforts with the CBP acqui-*
 16 *sition program office and other partners within*
 17 *CBP and the Department of Homeland Security;*

18 *(4) the identification of technologies used by*
 19 *other Federal departments or agencies not in use by*
 20 *CBP that could assist in enhancing mission needs*
 21 *along international borders or at ports of entry;*

22 *(5) an analysis of authorities available to CBP*
 23 *to procure technologies referred to in subsection (a);*

1 (6) *an assessment of whether additional or alter-*
2 *native authorities are needed to carry out the pur-*
3 *poses described in subsection (a);*

4 (7) *an explanation of how CBP plans to scale*
5 *existing programs related to emerging or advanced*
6 *technologies that are safe and secure into programs of*
7 *record;*

8 (8) *a description of each planned security-related*
9 *technology program, including objectives, goals, and*
10 *timelines for each such program;*

11 (9) *an assessment of the potential privacy, civil*
12 *rights, civil liberties, and safety impacts of these tech-*
13 *nologies on individuals, and potential mitigation*
14 *measures;*

15 (10) *an assessment of CBP legacy border tech-*
16 *nology programs that could be phased out and re-*
17 *placed with technologies referred to in subsection (a),*
18 *including cost estimates relating to such phase out*
19 *and replacement;*

20 (11) *information relating to how CBP is coordi-*
21 *nating with the Department of Homeland Security's*
22 *Science and Technology Directorate—*

23 *(A) to research and develop new, innovative,*
24 *disruptive, or other emerging or advanced tech-*

1 *nologies that are safe and secure to carry out the*
2 *purposes described in subsection (a);*

3 *(B) to identify new, innovative, disruptive,*
4 *or other emerging or advanced technologies that*
5 *are safe and secure and that are in development*
6 *or have been deployed by the private and public*
7 *sectors and may satisfy the mission needs of*
8 *CBP, with or without adaptation;*

9 *(C) to incentivize the private sector to de-*
10 *velop technologies, including privacy enhancing*
11 *technologies, that may help CBP meet mission*
12 *needs to enhance, or address capability gaps in,*
13 *border security operations; and*

14 *(D) to identify and assess ways to increase*
15 *opportunities for communication and collabora-*
16 *tion with the private sector, small, and dis-*
17 *advantaged businesses, intra-governmental enti-*
18 *ties, university centers of excellence, and Federal*
19 *laboratories to leverage emerging technology and*
20 *research within the public and private sectors;*

21 *(12) information relating to CBP's coordination*
22 *with the Department of Homeland Security official*
23 *responsible for artificial intelligence policy to ensure*
24 *the plan complies with the Department's policies and*

1 *measures promoting responsible use of artificial intel-*
2 *ligence;*

3 *(13) information regarding metrics and key per-*
4 *formance parameters for evaluating the effectiveness*
5 *of efforts to identify, integrate, and deploy new, inno-*
6 *vative, disruptive, or other emerging or advanced*
7 *technologies that are safe and secure to carry out the*
8 *purposes described in subsection (a);*

9 *(14) the identification of recent technological ad-*
10 *vancements relating to—*

11 *(A) manned aircraft sensor, communica-*
12 *tion, and common operating picture technology;*

13 *(B) unmanned aerial systems and related*
14 *technology, including counter-unmanned aerial*
15 *system technology;*

16 *(C) surveillance technology, including—*

17 *(i) mobile surveillance vehicles;*

18 *(ii) associated electronics, including*
19 *cameras, sensor technology, and radar;*

20 *(iii) tower-based surveillance tech-*
21 *nology;*

22 *(iv) advanced unattended surveillance*
23 *sensors; and*

24 *(v) deployable, lighter-than-air, ground*
25 *surveillance equipment;*

1 (D) *nonintrusive inspection technology, in-*
2 *cluding non-X-ray devices utilizing muon tomog-*
3 *raphy and other advanced detection technology;*

4 (E) *tunnel detection technology;*

5 (F) *communications equipment, includ-*
6 *ing—*

7 (i) *radios;*

8 (ii) *long-term evolution broadband;*

9 (iii) *miniature satellites;*

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

19 (16) *any other information the Secretary deter-*
20 *mines to be relevant.*

21 (c) *CBP INNOVATION TEAM AUTHORITY.—*

22 (1) *IN GENERAL.—The Commissioner for CBP is*
23 *authorized to maintain 1 or more CBP Innovation*
24 *Teams to research and adapt commercial technologies*
25 *that are new, innovative, disruptive, privacy enhanc-*

1 *ing, or otherwise emerging or advanced and may be*
2 *used by CBP—*

3 *(A) to enhance mission needs along inter-*
4 *national borders and at ports of entry; and*

5 *(B) to assess potential outcomes, including*
6 *any negative consequences, of the introduction of*
7 *emerging or advanced technologies with respect*
8 *to which documented capability gaps in border*
9 *security operations are yet to be determined.*

10 *(2) FUNCTIONS.—Each CBP Innovation Team*
11 *shall—*

12 *(A) operate consistent with the Department*
13 *of Homeland Security’s and CBP’s—*

14 *(i) procurement and acquisition man-*
15 *agement policy; and*

16 *(ii) policies pertaining to responsible*
17 *use of artificial intelligence; and*

18 *(B) consult with the Officer for Civil Rights*
19 *and Civil Liberties and the Privacy Officer of*
20 *the Department of Homeland Security to ensure*
21 *programs, policies, and procedures involving*
22 *civil rights, civil liberties, and privacy consider-*
23 *ations are addressed in an integrated and com-*
24 *prehensive manner.*

1 (3) *OPERATING PROCEDURES, PLANNING, STRA-*
2 *TEGIC GOALS.—The Commissioner for CBP shall re-*
3 *quire each CBP Innovation Team maintained pursu-*
4 *ant to paragraph (1) to establish, in coordination*
5 *with other appropriate offices of the Department of*
6 *Homeland Security—*

7 (A) *operating procedures, which shall in-*
8 *clude—*

9 (i) *specificity regarding roles and re-*
10 *sponsibilities within each such team and*
11 *with respect to Department of Homeland*
12 *Security and non-Federal partners; and*

13 (ii) *protocols for entering into agree-*
14 *ments to rapidly transition such tech-*
15 *nologies to existing or new programs of*
16 *record to carry out the purposes described*
17 *in subsection (a);*

18 (B) *planning and strategic goals for each*
19 *such team that includes projected costs, time*
20 *frames, metrics, and key performance parameters*
21 *relating to the achievement of identified strategic*
22 *goals, including a metric to measure the rate at*
23 *which technologies described in subsection (a) are*
24 *transitioned to existing or new programs of*

1 *record in accordance with subparagraph (A);*
2 *and*

3 *(C) operating procedures that ensure each*
4 *such team is in compliance with all applicable*
5 *laws, rules, and regulations and with the De-*
6 *partment of Homeland Security's policies per-*
7 *taining to procurement and acquisition manage-*
8 *ment, privacy, civil rights and civil liberties,*
9 *and the responsible use of artificial intelligence,*
10 *including risk assessments and ongoing moni-*
11 *toring to ensure accuracy and reliability.*

12 *(4) ANNUAL REPORT.—Not later than 180 days*
13 *after the date of the enactment of this Act and annu-*
14 *ally thereafter, the Commissioner for CBP shall sub-*
15 *mit to the Committee on Homeland Security and*
16 *Governmental Affairs of the Senate and the Com-*
17 *mittee on Homeland Security of the House of Rep-*
18 *resentatives information relating to the activities of*
19 *CBP Innovation Teams, including—*

20 *(A) copies of operating procedures and pro-*
21 *ocols required under paragraph (2)(A) and*
22 *planning and strategic goals required under*
23 *paragraph (2)(B);*

1 *(B) descriptions of the technologies piloted*
 2 *by each such team during the immediately pre-*
 3 *ceding fiscal year, including—*

4 *(i) information regarding which such*
 5 *technologies are determined to have been*
 6 *successful; and*

7 *(ii) the identification of documented*
 8 *capability gaps that are being addressed;*
 9 *and*

10 *(C) information regarding the status of ef-*
 11 *forts to rapidly transition technologies deter-*
 12 *mined successful to existing or new programs of*
 13 *record.*

14 *(d) COST-BENEFIT.—Before initiating the large-scale*
 15 *deployment of any new technology contained in the plan*
 16 *required under subsection (a), the Secretary of Homeland*
 17 *Security shall consider the costs and benefits to the Govern-*
 18 *ment to ensure that the deployment of such technology will*
 19 *provide quantifiable improvements to border security.*

Amend the title so as to read: “An Act 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.”.

Calendar No. 754

118TH CONGRESS
2D Session

H. R. 7832

[Report No. 118-334]

AN ACT

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 to enhance, or address capability gaps in, border security operations, and for other purposes.

DECEMBER 19 (legislative day, DECEMBER 16), 2024

Reported with an amendment and an amendment to the title