

118TH CONGRESS  
2D SESSION

# S. 4674

To require transparency with respect to content and content provenance information, to protect artistic content, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 11 (legislative day, JULY 10), 2024

Ms. CANTWELL (for herself, Mrs. BLACKBURN, and Mr. HEINRICH) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To require transparency with respect to content and content provenance information, to protect artistic content, 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. SHORT TITLE; TABLE OF CONTENTS.**

4 This Act may be cited as the “Content Origin Protec-  
5 tion and Integrity from Edited and Deepfaked Media Act  
6 of 2024”.

7 **SEC. 2. SENSE OF CONGRESS.**

8 It is the sense of Congress that—

9 (1) there is a lack of—

1 (A) visibility into how artificial intelligence  
2 systems work;

3 (B) transparency regarding the informa-  
4 tion used to train such systems; and

5 (C) consensus-based standards and prac-  
6 tices to guide the development and deployment  
7 of such systems;

8 (2) it is becoming increasingly difficult to as-  
9 sess the nature, origins, and authenticity of digital  
10 content that has been generated or modified  
11 algorithmically;

12 (3) these deficiencies negatively impact the pub-  
13 lic and, particularly, the journalists, publishers,  
14 broadcasters, and artists whose content is used to  
15 train these systems and is manipulated to produce  
16 synthetic content and synthetically-modified content  
17 that competes unfairly in the digital marketplace  
18 with covered content; and

19 (4) the development and adoption of consensus-  
20 based standards would mitigate these impacts, cata-  
21 lyze innovation in this nascent industry, and put the  
22 United States in a position to lead the development  
23 of artificial intelligence systems moving forward.

24 **SEC. 3. DEFINITIONS.**

25 In this title:

1           (1) ARTIFICIAL INTELLIGENCE.—The term “ar-  
2           tificial intelligence” has the meaning given the term  
3           in section 5002 of the National Artificial Intelligence  
4           Initiative Act of 2020 (15 U.S.C. 9401).

5           (2) ARTIFICIAL INTELLIGENCE BLUE-  
6           TEAMING.—The term “artificial intelligence blue-  
7           teaming” means an effort to conduct operational  
8           vulnerability evaluations and provide mitigation  
9           techniques to entities who have a need for an inde-  
10          pendent technical review of the security posture of  
11          an artificial intelligence system.

12          (3) ARTIFICIAL INTELLIGENCE RED-  
13          TEAMING.—The term “artificial intelligence red-  
14          teaming” means structured adversarial testing ef-  
15          forts of an artificial intelligence system to identify  
16          risks, flaws, and vulnerabilities of the artificial intel-  
17          ligence system, such as harmful outputs from the  
18          system, unforeseen or undesirable system behaviors,  
19          limitations, or potential risks associated with the  
20          misuse of the system.

21          (4) CONTENT PROVENANCE INFORMATION.—  
22          The term “content provenance information” means  
23          state-of-the-art, machine-readable information docu-  
24          menting the origin and history of a piece of digital  
25          content, such as an image, a video, audio, or text.

1           (5) COVERED CONTENT.—The term “covered  
2 content” means a digital representation, such as  
3 text, an image, or audio or video content, of any  
4 work of authorship described in section 102 of title  
5 17, United States Code.

6           (6) COVERED PLATFORM.—The term “covered  
7 platform” means a website, internet application, or  
8 mobile application available to users in the United  
9 States, including a social networking site, video  
10 sharing service, search engine, or content aggrega-  
11 tion service available to users in the United States,  
12 that either—

13                   (A) generates at least \$50,000,000 in an-  
14 nual revenue; or

15                   (B) had at least 25,000,000 monthly active  
16 users for not fewer than 3 of the 12 months im-  
17 mediately preceding any conduct by the covered  
18 platform in violation of this Act.

19           (7) DEEPFAKE.—The term “deepfake” means  
20 synthetic content or synthetically-modified content  
21 that—

22                   (A) appears authentic to a reasonable per-  
23 son; and

24                   (B) creates a false understanding or im-  
25 pression.

1           (8) DIRECTOR.—The term “Director” means  
2 the Under Secretary of Commerce for Intellectual  
3 Property and Director of the United States Patent  
4 and Trademark Office.

5           (9) SYNTHETIC CONTENT.—The term “syn-  
6 thetic content” means information, including works  
7 of human authorship such as images, videos, audio  
8 clips, and text, that has been wholly generated by al-  
9 gorithms, including by artificial intelligence.

10          (10) SYNTHETICALLY-MODIFIED CONTENT.—  
11 The term “synthetically-modified content” means in-  
12 formation, including works of human authorship  
13 such as images, videos, audio clips, and text, that  
14 has been significantly modified by algorithms, in-  
15 cluding by artificial intelligence.

16          (11) UNDER SECRETARY.—The term “Under  
17 Secretary” means the Under Secretary of Commerce  
18 for Standards and Technology.

19          (12) WATERMARKING.—The term  
20 “watermarking” means the act of embedding infor-  
21 mation that is intended to be difficult to remove into  
22 an output, including an output such as text, an  
23 image, an audio, a video, software code, or any other  
24 digital content or data, for the purposes of verifying  
25 the authenticity of the output or the identity or

1 characteristics of its provenance, modifications, or  
2 conveyance

3 **SEC. 4. FACILITATION OF DEVELOPMENT OF STANDARDS**  
4 **FOR CONTENT PROVENANCE INFORMATION**  
5 **AND DETECTION OF SYNTHETIC CONTENT**  
6 **AND SYNTHETICALLY-MODIFIED CONTENT.**

7 (a) IN GENERAL.—The Under Secretary shall estab-  
8 lish a public-private partnership to facilitate the develop-  
9 ment of standards regarding content provenance informa-  
10 tion technologies and the detection of synthetic content  
11 and synthetically-modified content, including with respect  
12 to the following:

13 (1) Facilitating the development of guidelines  
14 and voluntary, consensus-based standards and best  
15 practices for watermarking, content provenance in-  
16 formation, synthetic content and synthetically-modi-  
17 fied content detection, including for images, audio,  
18 video, text, and multimodal content, the use of data  
19 to train artificial intelligence systems, and such  
20 other matters relating to transparency of synthetic  
21 media as the Under Secretary considers appropriate.

22 (2) Facilitating the development of guidelines,  
23 metrics, and practices to evaluate and assess tools to  
24 detect and label synthetic content, synthetically-  
25 modified content, and non-synthetic content, includ-

1 ing artificial intelligence red-teaming and artificial  
2 intelligence blue-teaming.

3 (3) Establishing grand challenges and prizes in  
4 coordination with the Defense Advanced Research  
5 Projects Agency and the National Science Founda-  
6 tion to detect and label synthetic content, syn-  
7 thetically-modified content, and non-synthetic con-  
8 tent and to develop cybersecurity and other counter-  
9 measures to defend against tampering with detection  
10 tools, watermarks, or content provenance informa-  
11 tion.

12 (b) CONSULTATION.—In developing the standards de-  
13 scribed in subsection (a), the Under Secretary shall con-  
14 sult with the Register of Copyrights and the Director.

15 **SEC. 5. NATIONAL INSTITUTE OF STANDARDS AND TECH-**  
16 **NOLOGY RESEARCH, DEVELOPMENT, AND**  
17 **PUBLIC EDUCATION REGARDING SYNTHETIC**  
18 **CONTENT AND SYNTHETICALLY-MODIFIED**  
19 **CONTENT.**

20 (a) RESEARCH AND DEVELOPMENT.—The Under  
21 Secretary shall carry out a research program to enable ad-  
22 vances in measurement science, standards, and testing re-  
23 lating to the robustness and efficacy of—

1 (1) technologies for synthetic content and syn-  
2 thetically-modified content detection, watermarking,  
3 and content provenance information; and

4 (2) cybersecurity protections and other counter-  
5 measures used to prevent tampering with such tech-  
6 nologies.

7 (b) PUBLIC EDUCATION CAMPAIGNS REGARDING  
8 SYNTHETIC CONTENT.—Not later than 1 year after the  
9 date of enactment of this Act, the Under Secretary shall,  
10 in consultation with the Register of Copyrights and the  
11 Director, carry out a public education campaign regarding  
12 synthetic content and synthetically-modified content (in-  
13 cluding deepfakes), watermarking, and content provenance  
14 information.

15 **SEC. 6. REQUIREMENTS FOR CONTENT PROVENANCE IN-**  
16 **FORMATION; PROHIBITED ACTS.**

17 (a) CONTENT PROVENANCE INFORMATION.—

18 (1) SYNTHETIC CONTENT AND SYN-  
19 THETICALLY-MODIFIED CONTENT.—Beginning on  
20 the date that is 2 years after the date of enactment  
21 of this Act, any person who, for a commercial pur-  
22 pose, makes available in interstate commerce a tool  
23 used for the primary purpose of creating synthetic  
24 content or synthetically-modified content shall—



1 (A) taking into consideration the content  
2 provenance information standards established  
3 under section 4, provide users of such tool with  
4 the ability to include content provenance infor-  
5 mation that indicates the piece of digital con-  
6 tent is synthetic content or synthetically-modi-  
7 fied content for any synthetic content or syn-  
8 thetically-modified content created by the tool;  
9 and

10 (B) in the event a user opts to include con-  
11 tent provenance information under subpara-  
12 graph (A), establish, to the extent technically  
13 feasible, reasonable security measures to ensure  
14 that such content provenance information is  
15 machine-readable and not easily removed, al-  
16 tered, or separated from the underlying content.

17 (2) COVERED CONTENT.—Beginning on the  
18 date that is 2 years after the date of enactment of  
19 this Act, any person who, for a commercial purpose,  
20 makes available in interstate commerce a tool used  
21 for the primary purpose of creating or substantially  
22 modifying covered content shall—

23 (A) taking into consideration the content  
24 provenance information standards established  
25 under section 4, provide users of such tool with

1 the ability to include content provenance infor-  
2 mation for any covered content created or sig-  
3 nificantly modified by the tool; and

4 (B) in the event a user opts to include con-  
5 tent provenance information under subpara-  
6 graph (A), establish, to the extent technically  
7 feasible, reasonable security measures to ensure  
8 that such content provenance information is  
9 machine-readable and not easily removed, al-  
10 tered, or separated from the underlying content.

11 (b) REMOVAL OF CONTENT PROVENANCE INFORMA-  
12 TION.—

13 (1) IN GENERAL.—It shall be unlawful for any  
14 person to knowingly remove, alter, tamper with, or  
15 disable content provenance information in further-  
16 ance of an unfair or deceptive act or practice in or  
17 affecting commerce.

18 (2) COVERED PLATFORMS.—

19 (A) IN GENERAL.—Subject to subpara-  
20 graph (B), it shall be unlawful for a covered  
21 platform, to remove, alter, tamper with, or dis-  
22 able content provenance information or to sepa-  
23 rate the content provenance information from  
24 the content so that the content provenance in-

1           formation cannot be accessed by users of the  
2           platform.

3                   (B) EXCEPTION FOR SECURITY RE-  
4           SEARCH.—A covered platform shall not be liable  
5           for a violation of subparagraph (A) if such cov-  
6           ered platform removes, alters, tampers with, or  
7           disables content provenance information for a  
8           purpose necessary, proportionate, and limited to  
9           perform research to enhance the security of the  
10          covered platform.

11          (c) PROHIBITION ON NON-CONSENSUAL USE OF  
12   COVERED CONTENT THAT HAS ATTACHED OR ASSOCI-  
13   ATED CONTENT PROVENANCE INFORMATION.—It shall be  
14   unlawful for any person, for a commercial purpose, to  
15   knowingly use any covered content that has content prove-  
16   nance information that is attached to or associated with  
17   such covered content or covered content from which the  
18   person knows or should know that content provenance in-  
19   formation has been removed or separated in violation of  
20   subsection (b), in order to train a system that uses artifi-  
21   cial intelligence or an algorithm or to generate synthetic  
22   content or synthetically-modified content unless such per-  
23   son obtains the express, informed consent of the person  
24   who owns the covered content, and complies with any  
25   terms of use pertaining to the use of such content, includ-

1 ing terms regarding compensation for such use, as re-  
2 quired by the owner of copyright in such content.

3 **SEC. 7. ENFORCEMENT.**

4 (a) ENFORCEMENT BY THE COMMISSION.—

5 (1) UNFAIR OR DECEPTIVE ACTS OR PRAC-  
6 TICES.—A violation of this Act or a regulation pro-  
7 mulgated under this Act shall be treated as a viola-  
8 tion of a rule defining an unfair or deceptive act or  
9 practice prescribed under section 18(a)(1)(B) of the  
10 Federal Trade Commission Act (15 U.S.C.  
11 57a(a)(1)(B)).

12 (2) POWERS OF THE COMMISSION.—

13 (A) IN GENERAL.—The Commission shall  
14 enforce this Act in the same manner, by the  
15 same means, and with the same jurisdiction,  
16 powers, and duties as though all applicable  
17 terms and provisions of the Federal Trade  
18 Commission Act (15 U.S.C. 41 et seq.) were in-  
19 corporated into and made a part of this title.

20 (B) PRIVILEGES AND IMMUNITIES.—Any  
21 person who violates this Act, or a regulation  
22 promulgated under this Act shall be subject to  
23 the penalties and entitled to the privileges and  
24 immunities provided in the Federal Trade Com-  
25 mission Act (15 U.S.C. 41 et seq.).

1           (C) AUTHORITY PRESERVED.—Nothing in  
2           this Act shall be construed to limit the author-  
3           ity of the Commission under any other provi-  
4           sion of law.

5           (b) ENFORCEMENT BY STATES.—

6           (1) IN GENERAL.—In any case in which the at-  
7           torney general of a State has reason to believe that  
8           an interest of the residents of the State has been or  
9           is threatened or adversely affected by the engage-  
10          ment of any person in a practice that violates this  
11          Act, the attorney general of the State may, as  
12          *parens patriae*, bring a civil action on behalf of the  
13          residents of the State in an appropriate district  
14          court of the United States to—

15                (A) enjoin further violation of this Act by  
16                such person;

17                (B) compel compliance with this Act;

18                (C) obtain damages, restitution, or other  
19                compensation on behalf of such residents; and

20                (D) obtain such other relief as the court  
21                may consider to be appropriate.

22          (2) RIGHTS OF THE COMMISSION.—

23                (A) NOTICE TO THE COMMISSION.—

24                    (i) IN GENERAL.—Except as provided  
25                    in clause (iii), the attorney general of a

1 State shall notify the Commission in writ-  
2 ing that the attorney general intends to  
3 bring a civil action under paragraph (1)  
4 before initiating the civil action.

5 (ii) CONTENTS.—The notification re-  
6 quired by clause (i) with respect to a civil  
7 action shall include a copy of the complaint  
8 to be filed to initiate the civil action.

9 (iii) EXCEPTION.—If it is not feasible  
10 for the attorney general of a State to pro-  
11 vide the notification required by clause (i)  
12 before initiating a civil action under para-  
13 graph (1), the attorney general shall notify  
14 the Commission immediately upon insti-  
15 tuting the civil action.

16 (B) INTERVENTION BY THE COMMISS-  
17 SION.—The Commission may—

18 (i) intervene in any civil action  
19 brought by the attorney general of a State  
20 under paragraph (1); and

21 (ii) upon intervening—

22 (I) be heard on all matters aris-  
23 ing in the civil action; and

24 (II) file petitions for appeal of a  
25 decision in the civil action.

1           (3) INVESTIGATORY POWERS.—Nothing in this  
2 subsection may be construed to prevent the attorney  
3 general of a State from exercising the powers con-  
4 ferred on the attorney general by the laws of the  
5 State to conduct investigations, to administer oaths  
6 or affirmations, or to compel the attendance of wit-  
7 nesses or the production of documentary or other  
8 evidence.

9           (4) ACTION BY THE COMMISSION.—If the Com-  
10 mission institutes a civil action or an administrative  
11 action with respect to a violation of this Act, the at-  
12 torney general of a State may not, during the pend-  
13 ency of such action, bring a civil action under para-  
14 graph (1) against any defendant named in the com-  
15 plaint of the Commission for the violation with re-  
16 spect to which the Commission instituted such ac-  
17 tion.

18           (5) VENUE; SERVICE OR PROCESS.—

19           (A) VENUE.—Any action brought under  
20 paragraph (1) may be brought in—

21           (i) the district court of the United  
22 States that meets applicable requirements  
23 relating to venue under section 1391 of  
24 title 28, United States Code; or

1 (ii) another court of competent juris-  
2 diction.

3 (B) SERVICE OF PROCESS.—In an action  
4 brought under paragraph (1), process may be  
5 served in any district in which the defendant—

6 (i) is an inhabitant; or

7 (ii) may be found.

8 (6) ACTIONS BY OTHER STATE OFFICIALS.—

9 (A) IN GENERAL.—In addition to civil ac-  
10 tions brought by attorneys general under para-  
11 graph (1), any other officer of a State who is  
12 authorized by the State to do so may bring a  
13 civil action under paragraph (1), subject to the  
14 same requirements and limitations that apply  
15 under this subsection to civil actions brought by  
16 attorneys general.

17 (B) SAVINGS PROVISION.—Nothing in this  
18 subsection may be construed to prohibit an au-  
19 thorized official of a State from initiating or  
20 continuing any proceeding in a court of the  
21 State for a violation of any civil or criminal law  
22 of the State.

23 (7) DAMAGES.—If a person brings a civil action  
24 for a violation of this Act pursuant to subsection (c)  
25 and receives any monetary damages, the court shall



1 reduce the amount of any damages awarded under  
2 this subsection by the amount of monetary damages  
3 awarded to such person.

4 (c) ENFORCEMENT BY PRIVATE PARTIES AND GOV-  
5 ERNMENT ENTITIES.—

6 (1) IN GENERAL.—Any person who owns cov-  
7 ered content that has content provenance informa-  
8 tion that is attached to or associated with such cov-  
9 ered content may bring a civil action in a court of  
10 competent jurisdiction against—

11 (A) any person or covered platform for re-  
12 moving, altering, tampering with, or disabling  
13 such content provenance information in viola-  
14 tion of subsection (b)(1) or (b)(2) of section 6;  
15 and

16 (B) any person for using such covered con-  
17 tent in violation of section 6(e).

18 (2) RELIEF.—In a civil action brought under  
19 paragraph (1) in which the plaintiff prevails, the  
20 court may award the plaintiff declaratory or injunc-  
21 tive relief, compensatory damages, and reasonable  
22 litigation expenses, including a reasonable attorney’s  
23 fee.

24 (3) STATUTE OF LIMITATIONS.—An action for  
25 a violation of this Act brought under this subsection

1        may be commenced not later than 4 years after the  
2        date upon which the plaintiff discovers or should  
3        have discovered the facts giving rise to such viola-  
4        tion.

5        **SEC. 8. RULE OF CONSTRUCTION.**

6        This Act does not impair or in any way alter the  
7        rights of copyright owners under any other applicable law.

8        **SEC. 9. SEVERABILITY.**

9        If any provision of this Act, or an amendment made  
10       by this Act, is determined to be unenforceable or invalid,  
11       the remaining provisions of this Act and the amendments  
12       made by this Act shall not be affected.

○