

119TH CONGRESS
1ST SESSION

H. R. 3259

To amend the National Quantum Initiative Act and the Cyber Security Research and Development Act to advance the rapid deployment of post quantum cybersecurity standards across the United States economy, support United States cryptography research, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 7, 2025

Ms. STEVENS (for herself and Ms. TENNEY) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To amend the National Quantum Initiative Act and the Cyber Security Research and Development Act to advance the rapid deployment of post quantum cybersecurity standards across the United States economy, support United States cryptography research, 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.**

4 This Act may be cited as the “Post Quantum Cyber-
5 security Standards Act”.

1 SEC. 2. NIST CRYPTOGRAPHY PROGRAMS AND NSF CRYP-

2 TOGRAPHY RESEARCH.

3 (a) NATIONAL INSTITUTE OF STANDARDS AND
4 TECHNOLOGY CRYPTOGRAPHY PROGRAMS.—The Na-
5 tional Quantum Initiative Act is amended—

6 (1) in section 2 (15 U.S.C. 8801)—

7 (A) by redesignating paragraphs (4), (5),
8 (6), (7), the first paragraph (8) (relating to the
9 definition of “Subcommittee on Economic and
10 Security Implications”), and the second para-
11 graph (8) (relating to the definition of “Sub-
12 committee on Quantum Information Science”) as
13 paragraphs (5), (7), (8), (9), (11), and (12),
14 respectively;15 (B) by inserting after paragraph (3) the
16 following new paragraph:17 “(4) CRITICAL INFRASTRUCTURE.—The term
18 ‘critical infrastructure’ has the meaning given such
19 term in section 1016(e) of Public Law 107–56 (42
20 U.S.C. 5195c(e));”21 (C) by inserting after paragraph (5), as so
22 redesignated, the following new paragraph:23 “(6) POST-QUANTUM CRYPTOGRAPHY.—The
24 term ‘post-quantum cryptography’ means those cryp-
25 tographic algorithms or methods that are assessed

1 not to be specifically vulnerable to attack by either
2 a quantum computer or classical computer.”; and

3 (D) by inserting after paragraph (9), as so
4 redesignated, the following new paragraph:

5 “(10) SECTOR RISK MANAGEMENT AGENCY.—

6 The term ‘sector risk management agency’ has the
7 meaning given such term in section 2200 of the
8 Homeland Security Act of 2002 (6 U.S.C. 650.”;
9 and

10 (2) in section 201 (15 U.S.C. 8831), by—

11 (A) redesignating subsection (c) as sub-
12 section (d); and

13 (B) inserting after subsection (b) the fol-
14 lowing new subsection:

15 “(c) POST QUANTUM CRYPTOGRAPHY DEPLOY-
16 MENT.—

17 “(1) IN GENERAL.—The Director of the Na-
18 tional Institute of Standards and Technology, in
19 consultation with the Secretary of Homeland Secu-
20 rity and the heads of sector risk management agen-
21 cies, as appropriate, shall promote the voluntary
22 adoption and deployment of post-quantum cryptog-
23 raphy standards, including by—

24 “(A) disseminating and making publicly
25 available guidance and resources to help organi-

zations adopt and deploy post-quantum cryptography standards;

3 “(B) providing technical assistance, as
4 practicable, to entities that are high risk of
5 quantum cryptoanalytic attacks, such as enti-
6 ties determined to be critical infrastructure or
7 digital infrastructure providers; and

8 “(C) conducting such other activities as
9 determined necessary by the Director to pro-
10 mote the adoption and deployment of post-
11 quantum cryptography standards across the
12 United States.

13 “(2) GRANT PROGRAM.—

“(A) IN GENERAL.—Subject to the availability of appropriations and after the date on which the Director of National Institute of Standards and Technology has issued post-quantum cryptography standards under paragraph (1), the Director may establish a program to identify and provide technical assistance through the award of grants to entities that are at high risk of quantum cryptoanalytic attacks, including by granting funds, in adopting such post-quantum cryptographic standards

1 and remediating quantum-related
2 vulnerabilities.

3 “(B) USE OF FUNDS.—Grants awarded to
4 entities under this subsection may be used to
5 cover reasonable costs, up to a specified amount
6 established by the Director of the National In-
7 stitute of Standards and Technology, of activi-
8 ties to adopt post-quantum cryptographic
9 standards and remediate quantum-related
10 vulnerabilities.

11 “(C) GUIDANCE.—The Director of the Na-
12 tional Institute of Standards and Technology
13 may develop, and periodically update, guidance,
14 including eligibility, application disclosure re-
15 quirements, grant amount and duration, and
16 any additional requirements regarding the
17 award of grants under this paragraph.

18 “(D) CONSULTATION.—If the program de-
19 scribed in this paragraph is established, the Di-
20 rector of the National Institute of Standards
21 and Technology shall consult with the Director
22 of the Cybersecurity and Infrastructure Secu-
23 rity Agency of the Department of Homeland
24 Security, the heads of other Sector Specific
25 Agencies and risk management agencies, and

1 appropriate representatives of private sector en-
2 tities, including nonprofit organizations, to
3 share information regarding the program and
4 guidance developed under subparagraph (C).".

5 (b) NATIONAL SCIENCE FOUNDATION CRYPTO-
6 RAPHY RESEARCH.—Subsection (a)(1)(A) of section 4 of
7 the Cyber Security Research and Development Act (15
8 U.S.C. 7403) is amended by inserting “, including post-
9 quantum cryptography” before the semicolon.

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