

AMENDMENT NO. _____ Calendar No. _____

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—119th Cong., 1st Sess.

S. 1397

To require the Secretary of State to establish a quantum cooperation program to enhance international cooperation in quantum information science.

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 Mrs. SHAHEEN

Viz:

1 Strike all after the enacting clause and insert the fol-
2 lowing:

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “International Quantum
5 Research Exchange Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) APPROPRIATE CONGRESSIONAL COMMIT-
9 TEES.—The term “appropriate congressional com-
10 mittees” means the following:

1 (A) The Committee on Foreign Relations
2 of the Senate.

3 (B) The Committee on Foreign Affairs of
4 the House of Representatives.

5 (C) The Committee on Commerce, Science,
6 and Transportation of the Senate.

7 (D) The Committee on Energy and Com-
8 merce of the House of Representatives.

9 (2) INSTITUTION OF HIGHER EDUCATION.—The
10 term “institution of higher education” has the
11 meaning given the term in section 101(a) of the
12 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

13 (3) QUANTUM INFORMATION SCIENCE.—The
14 term “quantum information science” means the use
15 of the laws of quantum physics for the storage,
16 transmission, manipulation, computing, or measure-
17 ment of information.

18 **SEC. 3. DEPARTMENT OF STATE INTERNATIONAL QUAN-**
19 **TUM COOPERATION PROGRAM.**

20 (a) IN GENERAL.—The Secretary of State shall es-
21 tablish and carry out a program—

22 (1) to enhance international cooperation in
23 quantum information science through the competi-
24 tive award of matching grants to institutions of
25 higher education or eligible nonprofit organizations

1 (or consortia thereof) engaged in international col-
2 laborative research; and

3 (2) to support international scientist exchange
4 programs, including exchange programs that vary in
5 length from multi-day to multi-year visits.

6 (b) PROGRAM ALIGNMENT.—

7 (1) COORDINATION.—In carrying out the pro-
8 gram under subsection (a), the Secretary of State
9 shall coordinate with—

10 (A) the Director of the Office of Science
11 and Technology Policy;

12 (B) the Director of the National Quantum
13 Coordination Office (established under section
14 102(a) of the National Quantum Initiative Act
15 (15 U.S.C. 8812(a)));

16 (C) the Co-Chairs of the Subcommittee on
17 Quantum Information Science of the National
18 Science and Technology Council (established
19 under section 103(a) of the National Quantum
20 Initiative Act (15 U.S.C. 8813(a)); and

21 (D) the Co-Chairs of the Subcommittee on
22 the Economic and Security Implications of
23 Quantum Information Science of the National
24 Science and Technology Council (established

1 under section 105(a) of the National Quantum
2 Initiative Act (15 U.S.C. 8814a(a)).

3 (2) STRATEGIC ALIGNMENT.—In carrying out
4 the program under subsection (a), the Secretary of
5 State—

6 (A) shall—

7 (i) ensure alignment with the National
8 Quantum Information Science Strategy;
9 and

10 (ii) only fund collaborative research
11 programs with—

12 (I) countries who have signed
13 quantum cooperation statements with
14 the United States; or

15 (II) countries that are members
16 of the Five Eyes intelligence sharing
17 alliance; and

18 (B) may not fund research programs with
19 any foreign adversary as defined in section
20 825(d) of the National Defense Authorization
21 Act for Fiscal Year 2024 (Public Law 118–31;
22 46 U.S.C. 50309 note).

23 (3) RESEARCH SECURITY.—The activities au-
24 thorized under this section shall be carried out in a
25 manner consistent with the following:

1 (A) Subtitle D of title VI of the Research
2 and Development, Competition, and Innovation
3 Act (division B of Public Law 117–167; 42
4 U.S.C. 19231 et seq.).

5 (B) National Security Presidential Memo-
6 randum–33 (relating to supported research and
7 development national policy), issued January
8 2021, and its implementation guidance on re-
9 search security and research integrity, issued
10 January 2022, or any successor policy docu-
11 ment or guidance related to strengthening pro-
12 tections on research and development, funded
13 by the Federal Government, against the influ-
14 ence and exploitation of foreign governments.

15 (c) CONSULTATION.—In developing and operating
16 the program required under subsection (a), the Secretary
17 of State shall consult with—

- 18 (1) the appropriate congressional committees;
19 (2) the Special Envoy for Critical and Emerg-
20 ing Technologies;
21 (3) United States industry leaders;
22 (4) any technology experts the Secretary con-
23 sider relevant, including experts from academia;
24 and

1 (5) representatives from any United States
2 Government agency the Secretary considers relevant.

3 (d) ANNUAL REPORT.—Not later than 2 years after
4 the date of the enactment of this Act, and annually there-
5 after, the Secretary shall submit to the appropriate con-
6 gressional committees a report that contains the following
7 elements:

8 (1) A description of the activities pursued under
9 the authorities of this section during the prior year.

10 (2) A list of priority countries with which the
11 Department of State seeks to pursue increased col-
12 laboration on quantum information science.

13 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
14 authorized to be appropriated to carry out the program
15 required by subsection (a) \$20,000,000 for fiscal year
16 2026.

17 (f) SUNSET.—The authorities under this section shall
18 terminate on the date that is 10 years after the date of
19 the enactment of this title.