

117TH CONGRESS
1ST SESSION

S. 604

To authorize the establishment of a Technology Partnership among
democratic countries, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 4, 2021

Mr. WARNER (for himself, Mr. MENENDEZ, Mr. SCHUMER, Mr. YOUNG, Mr.
CORNYN, Mr. SASSE, Mr. RUBIO, and Mr. BENNET) introduced the fol-
lowing bill; which was read twice and referred to the Committee on For-
eign Relations

A BILL

To authorize the establishment of a Technology Partnership
among democratic countries, 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 “Democracy Technology
5 Partnership Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

8 (1) The 21st century will increasingly be de-
9 fined by economic competition rooted in techno-

1 logical advances. Leaders in adopting emerging tech-
 2 nologies, such as artificial intelligence, quantum
 3 computing, biotechnology, and next-generation tele-
 4 communications, and those who shape the use of
 5 such technologies, will garner economic, military,
 6 and political strength for decades.

7 (2) These technologies offer opportunities for
 8 the empowerment of citizens, but also and challenges
 9 to basic norms of democratic governance and inter-
 10 nationally recognized human rights. The collection
 11 and analysis of data from individuals allows govern-
 12 ments to know more about their residents' behaviors,
 13 preferences, interests, and activities than was pos-
 14 sible years ago. The concentration of this data in
 15 key technologies, such as smart phones, search data-
 16 bases, and facial recognition databases, along with
 17 the sharing of data among governments, creates
 18 pressing concerns about individuals' scope to exer-
 19 cise their fundamental political and social rights.

20 (3) This challenge arises as the integrity and
 21 efficacy of post-World War II international institu-
 22 tions are increasingly challenged. New approaches to
 23 multilateral cooperation and arrangements are need-
 24 ed to tackle the challenges ahead to ensure that the

1 United States continues to lead in critical tech-
2 nologies.

3 (4) As information and communications tech-
4 nologies have matured and increasingly mediate
5 large swathes of social, political and economic activ-
6 ity, it is incumbent on democratic governments to
7 address the ways in which these technologies have
8 undermined democratic values, consumer protec-
9 tions, and social cohesion. Moreover, as authori-
10 tarian regimes increasingly shape and deploy tech-
11 nologies to bolster repression, stifle free expression,
12 and interfere with free and fair elections in other
13 countries, the world's advanced democracies will
14 need to shape technology standards so that emerging
15 and critical technologies reflect democratic values,
16 including freedom of expression and privacy.

17 (5) Technological leadership by the world's
18 major liberal-democratic nations collectively will be
19 essential to safeguarding democratic institutions,
20 norms, and values, and contributing to global peace
21 and prosperity, especially as authoritarian govern-
22 ments seek to promote closed information systems
23 and technology that is not interoperable, often
24 through trade and investment practices that are in-
25 compatible with global norms. A unified approach by

1 like-minded nations is needed to counteract growing
2 investments in, and deployments of, emerging tech-
3 nologies by authoritarian powers.

4 (6) In addition to the development of emerging
5 technologies, democratic nations must lead in shap-
6 ing expectations for the responsible use of such tech-
7 nologies and push back against laissez faire ap-
8 proaches and authoritarian interests on internet gov-
9 ernance advanced in multilateral forums by—

10 (A) advocating against efforts to crim-
11 inalize or limit political dissent and freedom of
12 speech online, such as those spearheaded by the
13 Russian Federation, which seek to undermine
14 the Council of Europe’s Convention on
15 Cybercrime, done at Budapest November 23,
16 2001, in favor of a statist alternative; and

17 (B) prioritizing protections for elections,
18 and other processes essential for healthy democ-
19 racies, from cyber-attack.

20 (7) The world’s leading democracies must also
21 confront new challenges to their market-driven eco-
22 nomic systems to ensure their continued leadership
23 in technology and innovation. The People’s Republic
24 of China (referred to in this Act as the “PRC”) is
25 pursuing an industrial policy to achieve dominance

1 in key technologies, including 5G, artificial intel-
2 ligence (referred to in this section as “AI”), quan-
3 tum computing, hypersonics, biotechnology, space
4 capabilities, and autonomous vehicles.

5 (8) The PRC seeks to use technological superi-
6 ority for national security, military-civil fusion, and
7 economic gains, according to its strategic plans, in-
8 cluding—

9 (A) the Made in China 2025 strategy;

10 (B) the Five-Year Plan for Standardiza-
11 tion and China Standards 2035;

12 (C) the 2006 Medium-to-Long Term S&T
13 Plan;

14 (D) the 2010 State Council Decision on
15 Accelerating the Development of Strategic
16 Emerging Industries; and

17 (E) the 13th Five-Year Plan for the Devel-
18 opment of Strategic Emerging Industries.

19 (9) The PRC seeks to advance in areas in
20 which democratic countries currently have a techno-
21 logical advantage and move ahead in emerging tech-
22 nologies where China seeks a unique opportunity to
23 overtake such countries.

1 (10) For many years, the PRC has pursued in-
2 dustrial policies and discriminatory trade practices
3 that include—

4 (A) heavily subsidizing Chinese companies,
5 restricting foreign competition, conducting
6 forced technology transfers, and using both licit
7 and illicit means to access research and devel-
8 opment around technologies in order to advan-
9 tage Chinese companies in specific technology
10 fields;

11 (B) providing significant government fund-
12 ing for research and development in the PRC in
13 specific technologies to build future competitive-
14 ness;

15 (C) seeking to ensure global adoption of
16 Chinese technologies, and the success of Chi-
17 nese firms, especially in emerging and strategic
18 markets, through significant foreign direct in-
19 vestment, low-cost financing and comprehensive
20 services for foreign development projects,
21 through initiatives such as the Belt and Road
22 Initiative, which includes the Digital Silk Road
23 and the Health Silk Road, as well as the Smart
24 City Initiative, efforts centered on promoting
25 the use of Chinese exports by offering far

1 cheaper rates and bundling these deals into
2 larger development and aid packages;

3 (D) aiding the adoption of Chinese-led
4 standards for digital technologies and products
5 through compensating Chinese firms that sub-
6 mit standards and flooding forums with tech-
7 nical experts; and

8 (E) leveraging the international standard
9 setting bodies to advance the vision of the PRC
10 regarding standards and technologies.

11 (11) As a result of these practices in support of
12 Chinese companies, the PRC is increasing its influ-
13 ence in AI, 5G, and a wide range of other science
14 and technology disciplines that constitute long-term
15 economic and security threats to the United States,
16 its allies, and like-minded partners. According to
17 market research firm Dell'Oro Group, Huawei's
18 share of worldwide telecommunications revenue
19 equipment grew from 20 percent in 2014 to 31 per-
20 cent in 2020.

21 (12) While the United States semiconductor in-
22 dustry is the worldwide industry leader with approxi-
23 mately 50 percent of global market share and sales
24 of \$193,000,000,000 in 2019, the situation may be
25 changing. In 2019, all 6 of the new semiconductor

1 fabrication plants that opened worldwide were lo-
 2 cated outside of the United States, with 4 of these
 3 plants built in China. The Government of the PRC
 4 plans to spend \$150,000,000,000 on its computer
 5 chip industry during the next 10 years.

6 (13) The PRC uses technologies, such as AI,
 7 facial recognition, and biometrics, to increase control
 8 over its population, facilitating mass surveillance,
 9 scalable censorship, and technology-enabled social
 10 control, including against ethnic and religious mi-
 11 norities including Tibetans, Uyghurs, ethnic
 12 Kazakhs, Kyrgyz, and members of other Muslim mi-
 13 nority groups.

14 (14) The PRC uses its economic power to co-
 15 erce and censor companies, individuals, and coun-
 16 tries.

17 (15) In the past decade, the Government of the
 18 PRC—

19 (A) blocked exports of rare earth elements
 20 to Japan;

21 (B) threatened to curtail domestic sales of
 22 German cars;

23 (C) cut off tourism to South Korea;

24 (D) restricted banana imports from the
 25 Philippines; and

1 (E) imposed large tariffs on Australian
2 barley exports.

3 (16) The Government of the PRC—

4 (A) has banned United States technology
5 companies, including Facebook, Google, and
6 Twitter;

7 (B) has pressured movie studios based in
8 the United States to alter content in movies
9 that it deemed objectionable; and

10 (C) has retaliated against a range of
11 American companies for actual or perceived
12 support for a range of political positions, in-
13 cluding recognizing territorial claims of coun-
14 tries in border disputes with China, recognizing
15 Tibet, and more.

16 (17) Third countries have become particular
17 targets of Chinese investments in technology. These
18 third-country investments provide access to innova-
19 tion, data that allows Chinese companies to refine
20 their own systems, and influence over the policies of
21 these governments. The terms on which Chinese in-
22 vestments are made often are attractive in the short-
23 term but create conditions for Chinese ownership of,
24 or influence over, major industries in those coun-
25 tries.

1 (18) After decades of being the world leader in
2 key technologies, the United States is at risk of fall-
3 ing behind the PRC in key technologies of the fu-
4 ture. While private-sector research and development
5 investments have steadily increased in the United
6 States, Federal Government spending has declined
7 as a percentage of Gross Domestic Product from ap-
8 proximately 1.2 percent in 1976 to approximately
9 0.7 percent in 2018. The decline has been even
10 steeper in the physical sciences. The Federal Gov-
11 ernment plays a unique and critical role in Amer-
12 ica's innovation ecosystem. Government research and
13 development spending spurs private-sector invest-
14 ments, and the United States Government remains
15 the largest source of basic research funding, which
16 is foundational to game-changing technological
17 achievements.

18 (19) During the past several years, the PRC
19 has quadrupled its research and development spend-
20 ing and is on the brink of surpassing the United
21 States in total investments in key technologies, with
22 its growth in research and development spending
23 doubling the United States Government's spending
24 increase in this area. Chinese patent publications

1 have surged in the fields of artificial intelligence,
2 machine learning, and deep learning.

3 (20) The United States is highly dependent on
4 China for key components of critical technologies in
5 its supply chains, such as rare earths.

6 (21) The United States remains a leader in the
7 science and technology areas of engineering and biol-
8 ogy as well as key components, including tele-
9 communications equipment and semiconductors. The
10 United States does not have a domestic manufac-
11 turer of radio access network equipment for 5G net-
12 works, but is well-positioned to lead in 6G tele-
13 communications, which depend on software and
14 semiconductors, areas of United States strength.

15 (22) Other countries have unique knowledge,
16 expertise, and capabilities in numerous cutting edge
17 technologies, including semiconductor manufacturing
18 equipment, such as extreme ultraviolet lithography
19 machines for semiconductor fabrication and machine
20 tools for fabrication of custom components. In order
21 to successfully compete against the PRC, the United
22 States must partner with such countries.

23 (23) The private sector in the United States
24 and partner countries, including Japan, Korea, Aus-
25 tralia, New Zealand, the United Kingdom, and the

1 European Union has considerable expertise in both
2 technology and in standard setting, given the role of
3 the private sector in international standard setting
4 bodies, but this expertise can be better leveraged in
5 shaping United States technology policy.

6 **SEC. 3. SENSE OF CONGRESS.**

7 It is the sense of Congress that—

8 (1) emerging technology governance regimes
9 driven by undemocratic governments that do not re-
10 flect democratic values are gaining traction inter-
11 nationally through coercive, diplomatic, and unfair
12 economic, trade, and development practices;

13 (2) the United States is failing to lead inter-
14 national efforts or prioritize multilateral coordina-
15 tion, institutions, and legal compatibility in the area
16 of technology governance, ceding leadership to au-
17 thoritarian regimes and risking the growth of anti-
18 democratic norms and standards around tech-
19 nologies; and

20 (3) promoting greater coordination, common
21 functional problem-solving institutional mechanisms,
22 and more compatible legal regimes among demo-
23 cratic nations is essential to create an international
24 technology governance architecture that benefits all

1 nations and effectively counters and contains non-
 2 democratic governance regimes.

3 **SEC. 4. STATEMENT OF POLICY.**

4 It shall be the policy of the United States to lead in
 5 the creation of a new multilateral diplomatic architecture
 6 for technology policy composed of the world’s tech-leading
 7 democracies.

8 **SEC. 5. INTERNATIONAL TECHNOLOGY PARTNERSHIP OF-**
 9 **FICE AT THE DEPARTMENT OF STATE.**

10 (a) ESTABLISHMENT.—The Secretary of State shall
 11 establish an interagency-staffed International Technology
 12 Partnership Office (referred to in this section as the “Of-
 13 fice”), which shall be housed in the Department of State.

14 (b) LEADERSHIP.—

15 (1) SPECIAL AMBASSADOR.—The Office shall be
 16 headed by the Special Ambassador for Technology,
 17 who shall—

18 (A) be appointed by the President, by and
 19 with the advice and consent of the Senate;

20 (B) have the rank and status of ambas-
 21 sador; and

22 (C) report to the Secretary of State, unless
 23 otherwise directed by the Secretary of State.

24 (2) DIRECTORS.—The Secretary of Commerce
 25 and the Secretary of the Treasury shall each ap-

1 point, from within their respective departments, di-
2 rectors for International Technology Partnership,
3 who also shall serve as liaisons between the Office
4 and the Department of Commerce or the Depart-
5 ment of the Treasury, as applicable.

6 (c) MEMBERSHIP.—In addition to the leaders re-
7 ferred to in subsection (b), the Office shall include a rep-
8 resentative or expert detailee from key Federal agencies,
9 as determined by the Special Ambassador for Technology.

10 (d) PURPOSES.—The purposes of the Office shall in-
11 clude—

12 (1) creating an international technology part-
13 nership of democratic countries to develop har-
14 monized technology governance regimes and to fill
15 gaps where United States capabilities are currently
16 insufficient, with a specific focus on key tech-
17 nologies, including—

18 (A) artificial intelligence and machine
19 learning;

20 (B) 5G telecommunications and other ad-
21 vanced wireless networking technologies;

22 (C) semiconductor chip manufacturing;

23 (D) biotechnology;

24 (E) quantum computing;

1 (F) surveillance technologies, including fa-
2 cial recognition technologies and censorship
3 software; and

4 (G) fiber optic cables;

5 (2) vigorously identifying existing and, as need-
6 ed, new multilateral mechanisms to advance the ob-
7 jectives of the International Technology Partnership
8 around technology governance that advances demo-
9 cratic values;

10 (3) coordinating with such countries regarding
11 shared technology strategies, including technology
12 controls and standards, as informed by the reports
13 required under section 8; and

14 (4) developing strategies with partner countries
15 for coordinated, development and financial support
16 for the acquisition by key countries of the tech-
17 nologies listed in paragraph (1), or comparable tech-
18 nologies, in order to provide alternatives for those
19 countries to systems supported by authoritarian re-
20 gimes.

21 (e) SPECIAL HIRING AUTHORITIES.—The Secretary
22 of State may—

23 (1) hire support staff for the Office, in accord-
24 ance with section 303 of the Foreign Service Act of
25 1980 (22 U.S.C. 3943); and

1 (2) hire individuals to serve as experts or con-
2 sultants for the Office, in accordance with section
3 3109 of title 5, United States Code.

4 **SEC. 6. INTERNATIONAL TECHNOLOGY PARTNERSHIP.**

5 (a) PARTNERSHIP CRITERIA.—The Special Amba-
6 sador for Technology (referred to in this section as the
7 “Special Ambassador”) shall seek to establish an Inter-
8 national Technology Partnership with foreign countries
9 that have—

10 (1) democratic national government and a
11 strong commitment to democratic values, including
12 an adherence to the rule of law, freedom of speech,
13 and respect for and promotion of human rights, in-
14 cluding the right to privacy;

15 (2) an economy with advanced technology sec-
16 tors; and

17 (3) a demonstrated record of trust or an ex-
18 pressed interest in international cooperation and co-
19 ordination with the United States on important de-
20 fense and intelligence issues.

21 (b) POLITICAL AND ECONOMIC UNIONS.—The Inter-
22 national Technology Partnership may include relevant po-
23 litical and economic unions.

24 (c) OBJECTIVES.—The Special Ambassador, in co-
25 operation with International Technology Partnership par-

1 ticipants, shall pursue, as appropriate, through memo-
2 randa of understanding, executive agreements, free trade
3 agreements, and existing multilateral channels—

4 (1) coordination of technology policies and
5 standards among International Technology Partner-
6 ship countries through participation in international
7 standard setting bodies, such as the United Nations
8 Group of Governmental Experts, World Trade Orga-
9 nization, the 3rd Generation Partnership Project,
10 and the International Telecommunications Union,
11 including pre-attendance meetings, education, and
12 panels to report on issues;

13 (2) coordination of policies with the private sec-
14 tor to ensure private sector led, politically neutral,
15 standards processes;

16 (3) the adoption of shared data privacy, data
17 sharing, and data archiving standards among the
18 United States and partner countries and relevant
19 economic and political unions, including harmonized
20 data protection regulations;

21 (4) the creation of coordinated policies for the
22 use and control of emerging and foundational tech-
23 nologies through—

24 (A) use restrictions and export controls;

1 (B) investment screening coordination, in-
 2 cluding the harmonization of technology-trans-
 3 fer laws, regulations, policies, and practices;
 4 and

5 (C) the development of other arrangements
 6 to regulate and control technology transfer;

7 (5) coordination around the resiliency of supply
 8 chains in critical technology areas, with possible di-
 9 versification of supply chain components among the
 10 group, while—

11 (A) abiding by transparency obligations re-
 12 lated to subsidies and product origin;

13 (B) conducting risk analyses of products
 14 manufactured in third party nations that fail to
 15 meet established standards similarly;

16 (C) coordinating subsidy policies; and

17 (D) limiting preferential trade agreements
 18 between member countries;

19 (6) the coordination of supply chains regarding
 20 semiconductor fabrication through a fabrication re-
 21 search consortium for the semiconductor industry;

22 (7) the facilitation of partnerships and coopera-
 23 tion among and between research universities, start-
 24 up companies, and other businesses in member coun-
 25 tries regarding key technologies, including the cre-

1 ation of memoranda of understanding regarding
2 science and technology collaboration with member
3 countries and coordinated incentives and subsidies;

4 (8) the coordination of investments and co-fi-
5 nancing in targeted countries with the goal of—

6 (A) promoting secure and resilient digital
7 infrastructure and privacy-enhancing tech-
8 nologies that protect democratic values and cre-
9 ate a clear contrast and alternative to the PRC
10 through the United States International Devel-
11 opment Finance Corporation, the Export-Im-
12 port Bank of the United States, foreign devel-
13 opment finance institutions (including the
14 World Bank and the International Monetary
15 Fund), the European Bank for Reconstruction
16 and Development, the European Investment
17 Bank, partner country development institutions,
18 regional banks, other lending institutions, or
19 new investment mechanisms; and

20 (B) seeking to ensure that all funding pro-
21 vided by those institutions, for any purpose,
22 should be conditioned upon the protection of
23 democratic values, and that financing is forbid-
24 den to companies involved in the international

1 investment programs of authoritarian or
 2 illiberal governments; and

3 (9) information sharing among partner coun-
 4 tries to raise awareness of—

5 (A) the technology transfer threat posed by
 6 authoritarian governments; and

7 (B) ways in which autocratic regimes are
 8 utilizing technology to erode democracies.

9 (d) WORKING GROUPS.—In carrying out the objec-
 10 tives described in subsection (c) with respect to particular
 11 technology areas, the Special Ambassador may establish
 12 working groups within the International Technology Part-
 13 nership, composed of representatives from partner coun-
 14 tries, including relevant political and economic unions, to
 15 coordinate on discrete strategies and policies related to
 16 specific technologies.

17 **SEC. 7. INTERNATIONAL TECHNOLOGY PARTNERSHIP**
 18 **FUND.**

19 (a) ESTABLISHMENT.—There is established in the
 20 Treasury of the United States a trust fund, which shall
 21 be known as the “International Technology Partnership
 22 Fund” (referred to in this section as the “Fund”).

23 (b) DEPOSITS.—

1 (1) FEDERAL APPROPRIATIONS.—There is au-
2 thorized to be appropriated \$5,000,000,000 for the
3 Fund.

4 (2) DONATIONS.—In addition to amounts ap-
5 propriated for the Fund pursuant to paragraph (1),
6 the Secretary of the Treasury may accept donations
7 from International Technology Partnership member
8 countries.

9 (c) USE OF FUNDS.—Subject to subsection (d),
10 amounts deposited into the Fund may be used by the Sec-
11 retary of State, in consultation with the International
12 Technology Partnership and other relevant Federal agen-
13 cies, to support—

14 (1) joint research projects between government
15 research agencies, universities, technology compa-
16 nies, and other businesses from International Tech-
17 nology Partnership member countries; and

18 (2) technology investments in third-country
19 markets.

20 (d) NOTIFICATION REQUIREMENT.—The obligation
21 of funds under subsection (c) is subject to the notification
22 requirement set forth in section 634A of the Foreign As-
23 sistance Act of 1961 (22 U.S.C. 2394–1).

24 (e) PUBLIC-PRIVATE BOARD.—

1 (1) ESTABLISHMENT.—There is hereby estab-
2 lished an International Technology Partnership Ad-
3 visory Board (referred to in this subsection as the
4 “Board”), which shall provide the International
5 Technology Partnership Office with advice and rec-
6 ommendations concerning the implementation of this
7 Act.

8 (2) MEMBERSHIP.—The Board shall be com-
9 posed of individuals—

10 (A) with demonstrated expertise in the
11 fields of emerging technologies and inter-
12 national trade; and

13 (B) come from the private sector, academic
14 institutions, national and international human
15 rights organizations, and technology research
16 institutions.

17 **SEC. 8. DEPARTMENT OF STATE REPORTING REQUIRE-**
18 **MENTS.**

19 (a) NATIONAL STRATEGY FOR TECHNOLOGY AND
20 NATIONAL SECURITY.—Not later than 1 year after the
21 date of the enactment of this Act, the Secretary of State,
22 in consultation with other relevant Federal agencies, shall
23 submit an unclassified report to the Committee on Foreign
24 Relations of the Senate and the Committee on Foreign
25 Affairs of the House of Representatives, with a classified

1 index, if necessary, that outlines a national strategy for
2 technology and national security, which—

3 (1) assesses the emerging and foundational
4 technologies of the future;

5 (2) identifies the current capabilities of the
6 United States in critical technologies and its compo-
7 nents, including any gaps in such capabilities;

8 (3) identifies the technology capabilities (hori-
9 zon scanning and technology forecasting) among al-
10 lied and partner countries;

11 (4) identifies governance models for emerging
12 and foundational technologies being adopted by
13 other countries and other areas of global policy con-
14 vergence where the United States should better pur-
15 sue multilateralism or coordination;

16 (5) identifies a preliminary set of priority tech-
17 nology areas on which the International Technology
18 Partnership should be focused;

19 (6) analyzes the current capabilities of the PRC
20 in critical technologies and components, including
21 any gaps in such capabilities; and

22 (7) includes a set of recommendations for—

23 (A) rapidly enhancing United States tech-
24 nological capabilities;

1 (B) how the United States should collabo-
2 rate with allied or like-minded countries, identi-
3 fying existing and, as needed, new multilateral
4 mechanisms to fill capability gaps and areas for
5 the United States to advance democratic values;
6 and

7 (C) the criteria for determining which
8 countries should be included in the Inter-
9 national Technology Partnership, including a
10 strong commitment to democratic values and a
11 history of working closely with the United
12 States, as reflected in Department of State re-
13 ports regarding human rights and media free-
14 dom.

15 (b) STANDARDS AND GOVERNANCE REGIMES.—Not
16 later than 1 year after the date of the enactment of this
17 Act, the Secretary of State shall submit a report to the
18 Committee on Foreign Relations of the Senate and the
19 Committee on Foreign Affairs of the House of Representa-
20 tives that assesses other countries' standards and govern-
21 ance regimes for privacy, human rights, consumer protec-
22 tion, and free expression to supplement the criteria rec-
23 ommended pursuant to subsection (a)(7)(C).

○