

115TH CONGRESS 1ST SESSION

S. 449

To promote worldwide access to the Internet, and for other purposes.

IN THE SENATE OF THE UNITED STATES

February 27, 2017

Mr. Markey introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

A BILL

To promote worldwide access to the Internet, 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 "Driving Innovation and
- 5 Growth in Internet Technology and Launching Universal
- 6 Access to the Global Economy (DIGITAL AGE) Act of
- 7 2017".
- 8 SEC. 2. APPROPRIATE CONGRESSIONAL COMMITTEES DE-
- 9 FINED.
- In this Act, the term "appropriate congressional com-
- 11 mittees" means—

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1	(1) the Committee on Foreign Relations and
2	the Committee on Appropriations of the Senate; and
3	(2) the Committee on Foreign Affairs and the
4	Committee on Appropriations of the House of Rep-
5	resentatives.
6	SEC. 3. PURPOSE.
7	The purpose of this Act is to support and enhance
8	existing United States Government efforts to expand ac-
9	cess to the Internet for people living in developing coun-
10	tries as a means to catalyze innovation and economic
11	growth, promote democracy and good governance, create
12	new educational opportunities, improve health outcomes,
13	and strengthen global research networks.
14	SEC. 4. FINDINGS.
15	Congress makes the following findings:
16	(1) Internet access has been a driver of eco-
17	nomic activity around the world. Unbounded by na-
18	tional borders, it contains the potential to signifi-
19	cantly reduce global economic inequality.
20	(2) Of more than 7,000,000,000 people in the
21	world, 3,460,000,000 were using the Internet by the
22	end of 2016. 47 percent of the world's population is

now online, with 2,500,000,000 users living in the

developing world.

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- (3) Nevertheless, more than half of the world's population remains offline, living without the eco-nomic and social benefits of the Internet, and developing countries remain far behind global averages in terms of connectivity, creating a global "digital di-vide". By the end of 2016, 83.8 percent of house-holds in the developed world had Internet access, compared with just 41.1 percent of households in de-veloping countries and just 11.1 percent in the world's least developed countries.
 - (4) There is inequality within countries as well. Across the developing world, there are on average 23 percent fewer women online than men. Uneven connectivity and usage whether between countries or between people risks leaving those who are not online behind.
 - (5) It is widely recognized that information and communication technologies will help achieve progress across the 17 goals of the United Nations 2030 Agenda for Sustainable Development.
 - (6) Achieving this goal requires overcoming many barriers. Governments of developing countries often lack the resources to make this investment, and there are sometimes significant barriers to pri-

- vate sector investment in connectivity, particularly in
 rural and other remote areas.
 - (7) In addition to obstacles to expanding connectivity infrastructure, there are often barriers to access even where that infrastructure is in place. In the world's least developed countries, one month of Internet access can cost well over the average person's annual income. The cost of devices for accessing the Internet, a lack of digital and traditional literacy, gender and other inequality, and limited locally relevant content also combine to serve as barriers to universal Internet access and usage.
 - (8) Even where infrastructure and devices are available, some governments are active in censoring and restricting access to certain content and services and enhancing surveillance over and repression of online conduct in contravention of internationally recognized human rights standards. According to a 2016 Freedom House study, 67 percent the world's Internet users live in countries where criticism of the government, military, or ruling family has been subject to censorship.
 - (9) While these are significant barriers, there are proven policies that countries can implement to address them. Creating a regulatory approach that

- promotes a competitive marketplace, taxing Internet access devices such as smartphones appropriately, promoting free expression and the free flow of data, and creating universal service funds are just some of the policies that can help bring the cost of infrastructure investment and Internet access to a more affordable level.
 - (10) The United States is already a leader in promoting access to open, interoperable Internet around the world. For example, in April 2016, the Department of State launched a new diplomatic effort called "Global Connect", which seeks to bring an additional 1,500,000,000 people online by 2020.
 - (11) United States Government support for expanded Internet access is not only in keeping with our global leadership in the effort to end extreme global poverty and enabling resilient, democratic societies, but is also vital for United States national security and economic interests.

20 SEC. 5. STATEMENT OF POLICY.

- 21 It is the policy of the United States—
- 22 (1) to promote increased public and private in-23 vestment in Internet infrastructure and the creation 24 of the conditions for universal Internet access and 25 usage worldwide by working with—

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1	(A) foreign governments to encourage poli-
2	cies to increase coverage and reduce the cost of
3	access, including by—
4	(i) creating a regulatory approach
5	that promotes a competitive market for in-
6	vestment and innovation in Internet infra-
7	structure and services, including fiber
8	optic, mobile, satellite, Wi-Fi and other
9	connectivity technologies as well as digital
10	financial services and other innovative
11	services and content that can drive use;
12	(ii) developing policies for effective,
13	transparent and efficient spectrum alloca-
14	tion, ensuring adequate bandwidth is re-
15	leased to drive the expansion of 3G, 4G,
16	and successive generations of data-rich mo-
17	bile network services while also encour-
18	aging innovative use of wireless tech-
19	nologies to meet public interest goals;
20	(iii) promoting policies that encourage
21	infrastructure sharing and are aimed at
22	creating incentives for network operators
23	to share backbone, tower, and other forms
24	of communications infrastructure, as a

means to significantly lower network costs;

1	(iv) promoting policies that encourage
2	the integration of Internet infrastructure
3	into traditional infrastructure projects to
4	reduce costs, such as by laying of fiber
5	optic cable simultaneously with road con-
6	struction;
7	(v) promoting mechanisms for public
8	financing of rural broadband connectivity
9	and digital inclusion, such as transparent
10	and well-managed universal service funds,
11	similar to the one managed by the Federal
12	Communications Commission, which also
13	includes the "E-Rate" program, which is
14	specifically designed to connect schools and
15	libraries to the Internet;
16	(vi) encouraging the creation,
17	strengthening, and sustainment of inde-
18	pendent agencies to regulate the tele-
19	communications and Internet industry and
20	ensure consultation with all stakeholders in
21	the formulation and execution of policies
22	and regulations;
23	(vii) encouraging the development of
24	national broadband access plans with spe-

cific, time-bound, and measurable goals for

1	achieving universal affordable access, in-
2	cluding a specific plan for bringing women,
3	minority, and other marginalized groups
4	online, recognizing both the unique bar-
5	riers and the unique social and economic
6	benefits associated with extending access
7	to such groups;
8	(viii) collecting and openly releasing
9	timely, disaggregated data on all aspects of
10	connectivity, coverage, and digital skills,
11	including data on equality of access for
12	women, minority, and other disadvantaged
13	groups;
14	(ix) improving affordability of Inter-
15	net access devices such as smartphones
16	and personal computers;
17	(x) encouraging laws and regulations
18	that enhance privacy, freedom of expres-
19	sion, and other rights to ensure their rel-
20	evance and effectiveness in an online era,
21	with an emphasis on promoting a human
22	rights-respecting approach in all Internet

expansion efforts;

1	(xi) emphasizing the importance of
2	ensuring comparable access for persons
3	with disabilities;
4	(xii) promoting an open and free
5	Internet, which is essential for creating an
6	environment of equal opportunity where in-
7	novation can occur, and ensuring wholesale
8	broadband infrastructure is available to all
9	on fair and reasonable terms and in a
10	manner which is transparent and non-
11	discriminatory;
12	(xiii) creating public access facilities
13	in places such as libraries, schools, govern-
14	ment buildings, and community centers
15	and community Wi-Fi networks or dedi-
16	cated facilities for Internet access, which in
17	addition to providing free or low-cost ac-
18	cess, can be ideal locations for digital lit-
19	eracy training, online health, banking and
20	education services, job seeking, and access
21	to government data and e-government
22	services;
23	(xiv) creating and supporting research
24	and educational networks, which are vital
25	for connecting researchers and educators

1	worldwide and facilitating collaboration in
2	science, medicine, and other fields, and en-
3	suring a stable, high-speed Internet infra-
4	structure at universities, which is essential
5	for the development of local technology-
6	driven entrepreneurs;
7	(xv) promoting access to government
8	information and services online for pur-
9	poses of disseminating information to and
10	enabling participation by people who might
11	not otherwise have access to information or
12	participation, enhancing accountability,
13	and extending the reach of the government
14	to areas where it may have a limited pres-
15	ence (particularly rural areas) and for gen-
16	erating relevant content to draw people on-
17	line; and
18	(xvi) providing technical assistance
19	and prioritization of funding, supporting
20	policies and programs through assistance
21	in the form of technical expertise and expe-
22	rience sharing and, where appropriate
23	through material support and funding;
24	(B) international organizations and inter-
25	national finance institutions to increase support

1	for activities that expand Internet access, in-
2	cluding by—
3	(i) encouraging the increase of Inter-
4	net access-related programs and other in-
5	vestments beyond the 1 to 2 percent they
6	currently receive of all infrastructure-re-
7	lated investment financed by international
8	finance institutions; and
9	(ii) encouraging the integration of
10	Internet infrastructure into traditional in-
11	frastructure projects, such as the laying of
12	fiber optic cable simultaneously with road
13	construction to reduce costs; and
14	(C) private companies to facilitate invest-
15	ment in Internet infrastructure and affordable
16	services in the developing world, including by—
17	(i) offering and enhancing United
18	States Government programs to incentivize
19	and facilitate investment in Internet infra-
20	structure in developing countries;
21	(ii) encouraging companies to commit
22	to principles of responsible business con-
23	duct, develop systems and policies that
24	identify, prevent, mitigate, and account for
25	adverse human rights impacts, and en-

1	hance privacy and freedom of expression;
2	and
3	(iii) encouraging the adoption of coop-
4	erative infrastructure-sharing policies and
5	flexible approaches to spectrum reuse; and
6	(2) to promote digital literacy and other skills
7	people will need to take advantage of expanded and
8	improved access to Internet and close the global dig-
9	ital divide, including where possible, the integration
10	by USAID of digital literacy and related skills into
11	programming and support from USAID and the De-
12	partment of State for public access facilities, such as
13	Internet in schools, hospitals, government buildings,
14	and other facilities as relevant.
15	SEC. 6. SPECIAL REPRESENTATIVE FOR THE GLOBAL CON-
16	NECT INITIATIVE.
17	(a) Establishment.—The Secretary of State shall
18	designate to the U.S. Coordinator for International Com-
19	munications and Information Policy the additional role of
20	Special Representative for the Global Connect Initiative
21	(in this section referred to as "Special Representative"),
22	who shall continue to be appointed by the President, by
23	and with the consent of the Senate.
24	(b) Purpose.—In addition to carrying out the duties
25	described in subsection (c) and those duties determined

- 1 by the Secretary of State, the Special Representative shall
- 2 direct the foreign policy efforts of the United States Gov-
- 3 ernment to promote global universal Internet access, and
- 4 shall represent the United States internationally in bilat-
- 5 eral and multilateral engagement on these matters.
- 6 (c) Duties.—The Special Representative shall—
- 7 (1) oversee the Global Connect initiative to pro-
- 8 mote policies and programs that support quality, af-
- 9 fordable Internet access, with the goal of enabling
- first-time access to mobile and broadband Internet
- for at least 1,500,000,000 people in both urban and
- rural areas by 2020;
- 13 (2) promote greater investment by international
- 14 finance institutions and United States corporations
- in Internet infrastructure expansion and other
- projects to enhance connectivity, as described in sub-
- paragraphs (B) and (C) of section 5(1);
- 18 (3) encourage partner countries to adopt poli-
- cies designed to lower prices and improve the quality
- of Internet service, such as those described in sec-
- 21 tion 5(1)(A); and
- 22 (4) collaborate with other Federal agencies to
- seek opportunities to promote connectivity projects.
- 24 (d) Collaboration and Coordination.—The Spe-
- 25 cial Representative shall, as appropriate, collaborate and

- 1 coordinate with the Department of Commerce, the Federal
- 2 Communications Commission, the Overseas Private In-
- 3 vestment Corporation, the Export-Import Bank, the
- 4 United States Agency for International Development, the
- 5 Millennium Challenge Corporation, and other relevant
- 6 agencies in formulating United States policies, reports,
- 7 and implementation strategies for expanding global Inter-
- 8 net access.
- 9 (e) Appropriations.—There are authorized to be
- 10 appropriated—
- 11 (1) such funds as may be necessary to support
- the work of the Special Representative and three full
- time equivalent (FTE) staff members; and
- 14 (2) \$200,000 to provide further funding to the
- 15 Technology Leadership Program as part of a Global
- 16 Connect fund in order to help bring an additional
- 17 1,500,000,000 people online by 2020.
- 18 (f) Annual Report.—Not more than 180 days after
- 19 the date of the enactment of this Act, and annually there-
- 20 after, the Secretary of State shall submit to the appro-
- 21 priate committees a report describing—
- 22 (1) the plans and existing efforts of the United
- 23 States Government to promote universal Internet ac-
- 24 cess;

1	(2) specific steps taken toward the goals of con-
2	necting an additional 1,500,000,000 people by 2020
3	and expanding the information communications
4	technology sectors of developing countries;
5	(3) methods for private companies to partner in
6	furtherance of these goals; and
7	(4) recommendations for further executive and
8	legislative action.
9	SEC. 7. USAID SUPPORT FOR CONNECTIVITY, DIGITAL LIT-
10	ERACY, AND RELATED NEEDS.
11	(a) Purpose.—The Administrator of the United
12	States Agency for International Development is author-
13	ized to support expanded Internet connectivity worldwide
14	by—
15	(1) taking part in Department of State efforts
16	to provide guidance to partner governments on es-
17	tablishing regulatory policies that facilitate expanded
18	Internet connectivity and information communica-
19	tions technology sectors in developing countries;
20	(2) funding and implementing programs to ex-
21	pand Internet infrastructure and improve digital lit-
22	eracy, as well as other measures necessary to im-
23	prove Internet connectivity and usage, in close co-
24	ordination with the Secretary of State

- 1 (3) building the capacity of developing countries 2 to monitor and appropriately and transparently reg-3 ulate the Internet sector and to encourage private 4 investment in Internet infrastructure and services;
 - (4) integrating efforts to expand Internet access, develop appropriate technologies, and enhance digital literacy and the availability of relevant local content across development sectors such as health programs of the Agency, where appropriate; and
- 10 (5) carrying out other activities as deemed nec-11 essary by the Administrator.
- 12 (b) Authorization of Appropriations.—In addi-
- 13 tion to funds otherwise available for such purposes, there
- 14 is authorized to be appropriated \$1,000,000 in fiscal year
- 15 2017 to support USAID activities to promote universal
- 16 Internet connectivity.

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- 17 (c) Reporting.—The Administrator shall coordinate
- 18 with the Secretary of State to ensure USAID's activities
- 19 to promote universal Internet connectivity are included in
- 20 the report required under section 6(f).

1	SEC. 8. PRIORITIZATION OF EFFORTS FOR PROJECTS THAT
2	PROMOTE EXPANDED INTERNET ACCESS BY
3	THE OVERSEAS PRIVATE INVESTMENT COR-
4	PORATION.
5	(a) In General.—The Overseas Private Investment
6	Corporation should, as appropriate, prioritize and expedite
7	institutional efforts and assistance to facilitate the involve-
8	ment of such institutions in Internet access-related
9	projects and markets in developing counties and partner
10	with investors, private sector actors, and other stake-
11	holders to specifically increase access to high-quality,
12	open, and affordable Internet services. Such investments
13	should be focused on promoting Internet access with the
14	goal of—
15	(1) maximizing the number of people with new
16	access to Internet services;
17	(2) improving and expanding the construction
18	of Internet infrastructure, including fiber, mobile,
19	and other emerging access technologies;
20	(3) expanding access to Internet for those in
21	underserved and rural areas; and
22	(4) prioritizing investment in countries and re-
23	gions with particularly acute shortages of critical in-
24	frastructure and services needed for Internet access,
25	such as sub-Saharan Africa.

1 (b) AMENDMENTS.—Title IV of chapter 2 of part I 2 of the Foreign Assistance Act of 1961 is amended— 3 (1) in section 234(c) (22 U.S.C. 2194(c)), by 4 inserting "eligible investors or" after "involve"; 5 (2) in section 237(d) (22 U.S.C. 2197(d))— 6 (A) in paragraph (2), by inserting ", systems infrastructure costs," after "outside the 7 8 Corporation"; and (B) in paragraph (3), by inserting ", sys-9 10 tems infrastructure costs," after "project-spe-11 cific transaction costs"; 12 235(a)(2)(22)(3)in section U.S.C. 13 2195(a)(2)), by striking "2007" and inserting 14 "2021"; and 15 (4) in section 238(c) (22 U.S.C. 2198(c)), by 16 inserting "or having significant United States con-17 nections" after "owned by United States citizens". 18 (c) AUTHORIZATION OF APPROPRIATIONS.—There is 19 authorized to be appropriated \$5,000,000 for the Overseas 20 Private Investment Corporation for fiscal year 2017 to 21 carry out the purposes of this Act. 22 SEC. 9. DEVELOPMENT OF A COMPREHENSIVE STRATEGY. 23 (a) Strategy Required.—The President shall incorporate a comprehensive, integrated, multiyear strategy encouraging the efforts of developing countries to expand

- 1 information communications technology sectors of devel-
- 2 oping countries and access to the Internet for their people
- 3 as a means to catalyze innovation and economic growth,
- 4 promote democracy and good governance, create new edu-
- 5 cational opportunities, improve health outcomes, and
- 6 strengthen global research networks consistent with the
- 7 policy stated in section 5 into regular Department of State
- 8 and USAID strategic planning processes, including at the
- 9 departmental, bureau, and mission level.
- 10 (b) Annual Report.—Not later than 180 days after
- 11 the date of the enactment of this Act, and annually there-
- 12 after, the President shall submit to the Committee on For-
- 13 eign Relations of the Senate and the Committee on For-
- 14 eign Affairs of the House of Representatives a report that
- 15 contains the strategy required under subsection (a) and
- 16 includes the following elements:
- 17 (1) The objectives of the strategy and the cri-
- teria for determining the success of the strategy.
- 19 (2) A description of efforts to achieve the policy
- stated in section 5.
- 21 (3) A description of plans to support efforts of
- developing countries to expand Internet access with
- 23 the goal of creating favorable conditions for eco-
- 24 nomic growth and poverty reduction in urban and
- 25 rural areas.

- (4) A description of efforts by the United States Government to create an impact on the ena-bling policy and regulatory environments of devel-oping nations to foster Internet access as well as ex-panding access to digital goods and services with the goal of creating favorable conditions for information sharing, democratic governance, and poverty reduc-tion.
 - (5) A description of how United States investments to increase Internet access in developing countries may increase economic growth and thereby reduce the need for development assistance in the future.
 - (6) A description of efforts to include integration of gender-equitable affordable Internet access into existing economic and business assessments, evaluations, and indexes, such as Millennium Challenge Corporation economic constraints analyses.

(c) Interagency Working Group.—

(1) In General.—The President may, as appropriate, establish an Interagency Working Group to coordinate the activities of relevant United States Government departments and agencies involved in carrying out the strategy required under this section. These agencies should include the Department

1	of State, the United States Agency for International
2	Development, the Federal Communications Commis-
3	sion, the Millennium Challenge Corporation, the
4	Overseas Private Investment Corporation, and the
5	Export-Import Bank.
6	(2) Functions.—The Interagency Working
7	Group may, among other things—
8	(A) seek to coordinate the activities of the
9	United States Government departments and
10	agencies involved in implementing the strategy
11	required under this section;
12	(B) ensure efficient and effective coordina-
13	tion between participating departments and
14	agencies; and
15	(C) facilitate information sharing and co-
16	ordinate partnerships between the United
17	States Government, the private sector, and
18	other development partners to achieve the goals

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of the strategy.