

115TH CONGRESS  
1ST SESSION

# S. 449

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

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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

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## 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.**

10 In this Act, the term “appropriate congressional com-  
11 mittees” means—

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  
23               now online, with 2,500,000,000 users living in the  
24               developing world.

1           (3) Nevertheless, more than half of the world's  
2           population remains offline, living without the eco-  
3           nomic and social benefits of the Internet, and devel-  
4           oping countries remain far behind global averages in  
5           terms of connectivity, creating a global “digital di-  
6           vide”. By the end of 2016, 83.8 percent of house-  
7           holds in the developed world had Internet access,  
8           compared with just 41.1 percent of households in de-  
9           veloping countries and just 11.1 percent in the  
10          world's least developed countries.

11          (4) There is inequality within countries as well.  
12          Across the developing world, there are on average 23  
13          percent fewer women online than men. Uneven  
14          connectivity and usage whether between countries or  
15          between people risks leaving those who are not on-  
16          line behind.

17          (5) It is widely recognized that information and  
18          communication technologies will help achieve  
19          progress across the 17 goals of the United Nations  
20          2030 Agenda for Sustainable Development.

21          (6) Achieving this goal requires overcoming  
22          many barriers. Governments of developing countries  
23          often lack the resources to make this investment,  
24          and there are sometimes significant barriers to pri-

1 vate sector investment in connectivity, particularly in  
2 rural and other remote areas.

3 (7) In addition to obstacles to expanding  
4 connectivity infrastructure, there are often barriers  
5 to access even where that infrastructure is in place.  
6 In the world's least developed countries, one month  
7 of Internet access can cost well over the average per-  
8 son's annual income. The cost of devices for access-  
9 ing the Internet, a lack of digital and traditional lit-  
10 eracy, gender and other inequality, and limited lo-  
11 cally relevant content also combine to serve as bar-  
12 riers to universal Internet access and usage.

13 (8) Even where infrastructure and devices are  
14 available, some governments are active in censoring  
15 and restricting access to certain content and services  
16 and enhancing surveillance over and repression of  
17 online conduct in contravention of internationally  
18 recognized human rights standards. According to a  
19 2016 Freedom House study, 67 percent the world's  
20 Internet users live in countries where criticism of the  
21 government, military, or ruling family has been sub-  
22 ject to censorship.

23 (9) While these are significant barriers, there  
24 are proven policies that countries can implement to  
25 address them. Creating a regulatory approach that

1 promotes a competitive marketplace, taxing Internet  
2 access devices such as smartphones appropriately,  
3 promoting free expression and the free flow of data,  
4 and creating universal service funds are just some of  
5 the policies that can help bring the cost of infra-  
6 structure investment and Internet access to a more  
7 affordable level.

8 (10) The United States is already a leader in  
9 promoting access to open, interoperable Internet  
10 around the world. For example, in April 2016, the  
11 Department of State launched a new diplomatic ef-  
12 fort called “Global Connect”, which seeks to bring  
13 an additional 1,500,000,000 people online by 2020.

14 (11) United States Government support for ex-  
15 panded Internet access is not only in keeping with  
16 our global leadership in the effort to end extreme  
17 global poverty and enabling resilient, democratic so-  
18 cieties, but is also vital for United States national  
19 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—

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  
25 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-  
25 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  
23 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  
10 first-time access to mobile and broadband Internet  
11 for at least 1,500,000,000 people in both urban and  
12 rural areas by 2020;

13 (2) promote greater investment by international  
14 finance institutions and United States corporations  
15 in Internet infrastructure expansion and other  
16 projects to enhance connectivity, as described in sub-  
17 paragraphs (B) and (C) of section 5(1);

18 (3) encourage partner countries to adopt poli-  
19 cies designed to lower prices and improve the quality  
20 of Internet service, such as those described in sec-  
21 tion 5(1)(A); and

22 (4) collaborate with other Federal agencies to  
23 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  
12 the work of the Special Representative and three full  
13 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;

5           (4) integrating efforts to expand Internet ac-  
6           cess, develop appropriate technologies, and enhance  
7           digital literacy and the availability of relevant local  
8           content across development sectors such as health  
9           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.

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 countries 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 “, sys-  
7 tems infrastructure costs,” after “outside the  
8 Corporation”; and

9 (B) in paragraph (3), by inserting “, sys-  
10 tems infrastructure costs,” after “project-spe-  
11 cific transaction costs”;

12 (3) in section 235(a)(2) (22 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 in-  
24 corporate a comprehensive, integrated, multiyear strategy  
25 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-  
18 teria for determining the success of the strategy.

19 (2) A description of efforts to achieve the policy  
20 stated in section 5.

21 (3) A description of plans to support efforts of  
22 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.

1           (4) A description of efforts by the United  
2 States Government to create an impact on the ena-  
3 bling policy and regulatory environments of devel-  
4 oping nations to foster Internet access as well as ex-  
5 panding access to digital goods and services with the  
6 goal of creating favorable conditions for information  
7 sharing, democratic governance, and poverty reduc-  
8 tion.

9           (5) A description of how United States invest-  
10 ments to increase Internet access in developing  
11 countries may increase economic growth and thereby  
12 reduce the need for development assistance in the  
13 future.

14           (6) A description of efforts to include integra-  
15 tion of gender-equitable affordable Internet access  
16 into existing economic and business assessments,  
17 evaluations, and indexes, such as Millennium Chal-  
18 lenge Corporation economic constraints analyses.

19           (c) INTERAGENCY WORKING GROUP.—

20           (1) IN GENERAL.—The President may, as ap-  
21 propriate, establish an Interagency Working Group  
22 to coordinate the activities of relevant United States  
23 Government departments and agencies involved in  
24 carrying out the strategy required under this sec-  
25 tion. 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  
19 of the strategy.

○