



(Original Signature of Member)

116TH CONGRESS
2D SESSION

H. R. _____

To ensure appropriate prioritization, spectrum planning, and interagency coordination to support the Internet of Things.

IN THE HOUSE OF REPRESENTATIVES

Mr. WELCH introduced the following bill; which was referred to the Committee on _____

A BILL

To ensure appropriate prioritization, spectrum planning, and interagency coordination to support the Internet of Things.

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 “Developing Innovation
5 and Growing the Internet of Things Act” or the “DIGIT
6 Act”.

7 **SEC. 2. FINDINGS; SENSE OF CONGRESS.**

8 (a) FINDINGS.—Congress finds that—

1 (1) the Internet of Things refers to the growing
2 number of connected and interconnected devices;

3 (2) estimates indicate that more than
4 125,000,000,000 devices will be connected to the
5 internet by 2030;

6 (3) the Internet of Things has the potential to
7 generate trillions of dollars in new economic activity
8 around the world in the transportation, energy, agri-
9 culture, manufacturing, and health care sectors and
10 in other sectors that are critical to the growth of the
11 gross domestic product of the United States;

12 (4) businesses across the United States can de-
13 velop new services and products, improve the effi-
14 ciency of operations and logistics, cut costs, improve
15 worker and public safety, and pass savings on to
16 consumers by utilizing the Internet of Things and
17 related innovations;

18 (5) the Internet of Things will—

19 (A) be vital in furthering innovation and
20 the development of emerging technologies; and

21 (B) play a key role in developing artificial
22 intelligence and advanced computing capabili-
23 ties;

24 (6) the United States leads the world in the de-
25 velopment of technologies that support the internet,

1 the United States technology sector is well-posi-
2 tioned to lead in the development of technologies for
3 the Internet of Things, and the appropriate
4 prioritization of a national strategy with respect to
5 the Internet of Things would strengthen that posi-
6 tion;

7 (7) the Federal Government can implement this
8 technology to better deliver services to the public;
9 and

10 (8) the Senate unanimously passed Senate Res-
11 olution 110, 114th Congress, agreed to March 24,
12 2015, calling for a national strategy for the develop-
13 ment of the Internet of Things.

14 (b) SENSE OF CONGRESS.—It is the sense of Con-
15 gress that policies governing the Internet of Things
16 should—

17 (1) promote solutions with respect to the Inter-
18 net of Things that are secure, scalable, interoper-
19 able, industry-driven, and standards-based; and

20 (2) maximize the development and deployment
21 of the Internet of Things to benefit all stakeholders,
22 including businesses, governments, and consumers.

23 **SEC. 3. DEFINITIONS.**

24 In this Act:

1 (1) COMMISSION.—The term “Commission”
2 means the Federal Communications Commission.

3 (2) SECRETARY.—The term “Secretary” means
4 the Secretary of Commerce.

5 (3) STEERING COMMITTEE.—The term “steer-
6 ing committee” means the steering committee estab-
7 lished under section 4(e)(1).

8 (4) WORKING GROUP.—The term “working
9 group” means the working group convened under
10 section 4(a).

11 **SEC. 4. FEDERAL WORKING GROUP.**

12 (a) IN GENERAL.—The Secretary shall convene a
13 working group of Federal stakeholders for the purpose of
14 providing recommendations and a report to Congress re-
15 lating to the aspects of the Internet of Things described
16 in subsection (b).

17 (b) DUTIES.—The working group shall—

18 (1) identify any Federal regulations, statutes,
19 grant practices, budgetary or jurisdictional chal-
20 lenges, and other sector-specific policies that are in-
21 hibiting, or could inhibit, the development or deploy-
22 ment of the Internet of Things;

23 (2) identify any Federal regulations, statutes,
24 and activities that have benefitted or could benefit

1 the development or deployment of the Internet of
2 Things;

3 (3) consider policies or programs that encour-
4 age and improve coordination among Federal agen-
5 cies that have responsibilities that are relevant to
6 the objectives of this Act;

7 (4) consider any findings or recommendations
8 made by the steering committee and, where appro-
9 priate, act to implement those recommendations;

10 (5) examine—

11 (A) how Federal agencies can benefit from
12 utilizing the Internet of Things;

13 (B) the use of Internet of Things tech-
14 nology by Federal agencies as of the date on
15 which the working group performs the examina-
16 tion;

17 (C) the preparedness and ability of Federal
18 agencies to adopt Internet of Things technology
19 as of the date on which the working group per-
20 forms the examination and in the future; and

21 (D) any additional security measures that
22 Federal agencies may need to take to—

23 (i) safely and securely use the Inter-
24 net of Things, including measures that en-

1 sure the security of critical infrastructure;
2 and

3 (ii) enhance the resiliency of Federal
4 systems against cyber threats to the Inter-
5 net of Things;

6 (6) in carrying out the examinations required
7 under clauses (i) and (ii) of paragraph (5)(D), en-
8 sure to the maximum extent possible the coordina-
9 tion of the current and future activities of the Fed-
10 eral Government relating to security with respect to
11 the Internet of Things; and

12 (7) examine any additional security measures
13 that Federal agencies may need to take to protect
14 users of Internet of Things technology, especially
15 members of more vulnerable populations (including
16 children and older individuals).

17 (c) AGENCY REPRESENTATIVES.—In convening the
18 working group under subsection (a), the Secretary shall
19 have discretion to appoint representatives from Federal
20 agencies and departments as appropriate and shall specifi-
21 cally consider seeking representation from—

22 (1) the Department of Commerce, including—
23 (A) the National Telecommunications and
24 Information Administration;

1 (B) the National Institute of Standards
2 and Technology; and

3 (C) the National Oceanic and Atmospheric
4 Administration;

5 (2) the Department of Transportation;

6 (3) the Department of Homeland Security;

7 (4) the Office of Management and Budget;

8 (5) the National Science Foundation;

9 (6) the Commission;

10 (7) the Federal Trade Commission;

11 (8) the Office of Science and Technology Policy;

12 (9) the Department of Energy; and

13 (10) the Federal Energy Regulatory Commis-
14 sion.

15 (d) NONGOVERNMENTAL STAKEHOLDERS.—The
16 working group shall consult with nongovernmental stake-
17 holders with expertise relating to the Internet of Things,
18 including—

19 (1) the steering committee;

20 (2) information and communications technology
21 manufacturers, suppliers, service providers, and ven-
22 dors;

23 (3) subject matter experts representing indus-
24 trial sectors other than the technology sector that
25 can benefit from the Internet of Things, including

1 the transportation, energy, agriculture, and health
2 care sectors;

3 (4) small, medium, and large businesses;

4 (5) think tanks and academia;

5 (6) nonprofit organizations and consumer
6 groups;

7 (7) security experts;

8 (8) rural stakeholders; and

9 (9) other stakeholders with relevant expertise,
10 as determined by the Secretary.

11 (e) STEERING COMMITTEE.—

12 (1) ESTABLISHMENT.—There is established
13 within the Department of Commerce a steering com-
14 mittee to advise the working group.

15 (2) DUTIES.—The steering committee shall ad-
16 vise the working group with respect to—

17 (A) the identification of any Federal regu-
18 lations, statutes, grant practices, budgetary or
19 jurisdictional challenges, and other sector-spe-
20 cific policies that are inhibiting, or could in-
21 hibit, the development or deployment of the
22 Internet of Things;

23 (B) the identification of any Federal regu-
24 lations, statutes, and activities that have bene-

1 fitted or could benefit the development or de-
2 ployment of the Internet of Things;

3 (C) situations in which the use of the
4 Internet of Things is likely to deliver significant
5 and scalable economic and societal benefits to
6 the United States, including benefits from or
7 to—

8 (i) smart traffic and transit tech-
9 nologies;

10 (ii) augmented logistics and supply
11 chains;

12 (iii) sustainable infrastructure;

13 (iv) precision agriculture;

14 (v) environmental monitoring;

15 (vi) public safety; and

16 (vii) health care;

17 (D) policies, programs, or multi-stake-
18 holder activities that—

19 (i) promote or are related to the pri-
20 vacy of users of Internet of Things tech-
21 nology, especially members of more vulner-
22 able populations (including children and
23 older individuals);

1 (ii) may enhance the security of the
2 Internet of Things, including the security
3 of critical infrastructure;

4 (iii) may protect users of the Internet
5 of Things, especially members of more vul-
6 nerable populations (including children and
7 older individuals); and

8 (iv) may encourage coordination
9 among Federal agencies with jurisdiction
10 over the Internet of Things;

11 (E) the opportunities and challenges asso-
12 ciated with the use of Internet of Things tech-
13 nology by small businesses; and

14 (F) any international proceeding, inter-
15 national negotiation, or other international mat-
16 ter affecting the Internet of Things to which
17 the United States is or should be a party.

18 (3) MEMBERSHIP.—The Secretary shall appoint
19 to the steering committee members representing a
20 wide range of stakeholders outside of the Federal
21 Government with expertise relating to the Internet
22 of Things, including—

23 (A) information and communications tech-
24 nology manufacturers, suppliers, service pro-
25 viders, and vendors;

1 (B) subject matter experts representing in-
2 dustrial sectors other than the technology sector
3 that can benefit from the Internet of Things,
4 including the transportation, energy, agri-
5 culture, and health care sectors;

6 (C) small, medium, and large businesses;

7 (D) think tanks and academia;

8 (E) nonprofit organizations and consumer
9 groups;

10 (F) security experts;

11 (G) rural stakeholders; and

12 (H) other stakeholders with relevant exper-
13 tise, as determined by the Secretary.

14 (4) REPORT.—Not later than 1 year after the
15 date of enactment of this Act, the steering com-
16 mittee shall submit to the working group a report
17 that includes any findings or recommendations of
18 the steering committee.

19 (5) INDEPENDENT ADVICE.—

20 (A) IN GENERAL.—The steering committee
21 shall set the agenda of the steering committee
22 in carrying out the duties of the steering com-
23 mittee under paragraph (2).

24 (B) SUGGESTIONS.—The working group
25 may suggest topics or items for the steering

1 committee to study, and the steering committee
2 shall take those suggestions into consideration
3 in carrying out the duties of the steering com-
4 mittee.

5 (C) REPORT.—The steering committee
6 shall ensure that the report submitted under
7 paragraph (4) is the result of the independent
8 judgment of the steering committee.

9 (6) NO COMPENSATION FOR MEMBERS.—A
10 member of the steering committee shall serve with-
11 out compensation.

12 (7) TERMINATION.—The steering committee
13 shall terminate on the date on which the working
14 group submits the report under subsection (f).

15 (f) REPORT TO CONGRESS.—

16 (1) IN GENERAL.—Not later than 18 months
17 after the date of enactment of this Act, the working
18 group shall submit to Congress a report that in-
19 cludes—

20 (A) the findings and recommendations of
21 the working group with respect to the duties of
22 the working group under subsection (b);

23 (B) the report submitted by the steering
24 committee under subsection (e)(4), as the re-
25 port was received by the working group;

1 (C) recommendations for action or reasons
2 for inaction, as applicable, with respect to each
3 recommendation made by the steering com-
4 mittee in the report submitted under subsection
5 (e)(4); and

6 (D) an accounting of any progress made
7 by Federal agencies to implement recommenda-
8 tions made by the working group or the steer-
9 ing committee.

10 (2) COPY OF REPORT.—The working group
11 shall submit a copy of the report described in para-
12 graph (1) to—

13 (A) the Committee on Commerce, Science,
14 and Transportation and the Committee on En-
15 ergy and Natural Resources of the Senate;

16 (B) the Committee on Energy and Com-
17 merce of the House of Representatives; and

18 (C) any other committee of Congress, upon
19 request to the working group.

20 **SEC. 5. ASSESSING SPECTRUM NEEDS.**

21 (a) IN GENERAL.—The Commission, in consultation
22 with the National Telecommunications and Information
23 Administration, shall issue a notice of inquiry seeking pub-
24 lic comment on the current, as of the date of enactment

1 of this Act, and future spectrum needs to enable better
2 connectivity relating to the Internet of Things.

3 (b) REQUIREMENTS.—In issuing the notice of inquiry
4 under subsection (a), the Commission shall seek comments
5 that consider and evaluate—

6 (1) whether adequate spectrum is available, or
7 is planned for allocation, for commercial wireless
8 services that could support the growing Internet of
9 Things;

10 (2) if adequate spectrum is not available for the
11 purposes described in paragraph (1), how to ensure
12 that adequate spectrum is available for increased de-
13 mand with respect to the Internet of Things;

14 (3) what regulatory barriers may exist to pro-
15 viding any needed spectrum that would support uses
16 relating to the Internet of Things; and

17 (4) what the role of unlicensed and licensed
18 spectrum is and will be in the growth of the Internet
19 of Things.

20 (c) REPORT.—Not later than 1 year after the date
21 of enactment of this Act, the Commission shall submit to
22 the Committee on Commerce, Science, and Transportation
23 of the Senate, the Committee on Energy and Commerce
24 of the House of Representatives, and each member of the
25 working group a report that summarizes the comments

- 1 submitted in response to the notice of inquiry issued under
- 2 subsection (a).