S.

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

IN THE SENATE OF THE UNITED STATES

Mrs. Fischer (for herself, Mr. Schatz, Mr. Gardner, and Mr. Booker) introduced the following bill; which was read twice and referred to the Committee on

A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Developing Innovation and Growing the Internet of Things Act” or the “DIGIT Act”.

SEC. 2. FINDINGS; SENSE OF CONGRESS.

(a) FINDINGS.—Congress finds that—

(1) the Internet of Things refers to the growing number of connected and interconnected devices;
(2) estimates indicate that more than 125,000,000,000 devices will be connected to the internet by 2030;

(3) the Internet of Things has the potential to generate trillions of dollars in new economic activity around the world in the transportation, energy, agriculture, manufacturing, and health care sectors and in other sectors that are critical to the growth of the gross domestic product of the United States;

(4) businesses across the United States can develop new services and products, improve the efficiency of operations and logistics, cut costs, improve worker and public safety, and pass savings on to consumers by utilizing the Internet of Things and related innovations;

(5) the Internet of Things will—

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

(B) play a key role in developing artificial intelligence and advanced computing capabilities;

(6) the United States leads the world in the development of technologies that support the internet, the United States technology sector is well-positioned to lead in the development of technologies for
the Internet of Things, and the appropriate
prioritization of a national strategy with respect to
the Internet of Things would strengthen that posi-
tion;

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

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

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

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

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

SEC. 3. DEFINITIONS.

In this Act:

(1) COMMISSION.—The term “Commission”
means the Federal Communications Commission.
(2) **SECRETARY.**—The term “Secretary” means the Secretary of Commerce.

(3) **STEERING COMMITTEE.**—The term “steering committee” means the steering committee established under section 4(e)(1).

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

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

(a) **IN GENERAL.**—The Secretary shall convene a working group of Federal stakeholders for the purpose of providing recommendations and a report to Congress relating to the aspects of the Internet of Things described in subsection (b).

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

(1) identify any Federal regulations, statutes, grant practices, budgetary or jurisdictional challenges, and other sector-specific policies that are inhibiting, or could inhibit, the development or deployment of the Internet of Things;

(2) consider policies or programs that encourage and improve coordination among Federal agencies that have responsibilities that are relevant to the objectives of this Act;
(3) consider any findings or recommendations made by the steering committee and, where appropriate, act to implement those recommendations;

(4) examine—

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

(B) the use of Internet of Things technology by Federal agencies as of the date on which the working group performs the examination;

(C) the preparedness and ability of Federal agencies to adopt Internet of Things technology as of the date on which the working group performs the examination and in the future; and

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

(i) safely and securely use the Internet of Things, including measures that ensure the security of critical infrastructure; and

(ii) enhance the resiliency of Federal systems against cyber threats to the Internet of Things; and

(5) in carrying out the examinations required under clauses (i) and (ii) of paragraph (4)(D), en-
sue to the maximum extent possible the coordina-
tion of the current and future activities of the Fed-
eral Government relating to security with respect to
the Internet of Things.

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

(1) the Department of Commerce, including—

(A) the National Telecommunications and
Information Administration;

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

(C) the National Oceanic and Atmospheric
Administration;

(2) the Department of Transportation;

(3) the Department of Homeland Security;

(4) the Office of Management and Budget;

(5) the National Science Foundation;

(6) the Commission;

(7) the Federal Trade Commission;

(8) the Office of Science and Technology Policy;

(9) the Department of Energy; and
(10) the Federal Energy Regulatory Commission.

(d) Nongovernmental Stakeholders.—The working group shall consult with nongovernmental stakeholders with expertise relating to the Internet of Things, including—

(1) the steering committee;

(2) information and communications technology manufacturers, suppliers, service providers, and vendors;

(3) subject matter experts representing industrial sectors other than the technology sector that can benefit from the Internet of Things, including the transportation, energy, agriculture, and health care sectors;

(4) small, medium, and large businesses;

(5) think tanks and academia;

(6) nonprofit organizations and consumer groups;

(7) security experts;

(8) rural stakeholders; and

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

(c) Steering Committee.—
(1) ESTABLISHMENT.—There is established within the Department of Commerce a steering committee to advise the working group.

(2) DUTIES.—The steering committee shall advise the working group with respect to—

(A) the identification of any Federal regulations, statutes, grant practices, programs, budgetary or jurisdictional challenges, and other sector-specific policies that are inhibiting, or could inhibit, the development of the Internet of Things;

(B) situations in which the use of the Internet of Things is likely to deliver significant and scalable economic and societal benefits to the United States, including benefits from or to—

   (i) smart traffic and transit technologies;

   (ii) augmented logistics and supply chains;

   (iii) sustainable infrastructure;

   (iv) precision agriculture;

   (v) environmental monitoring;

   (vi) public safety; and

   (vii) health care;
(C) whether adequate spectrum is available to support the growing Internet of Things and what legal or regulatory barriers may exist to providing any spectrum needed in the future;

(D) policies, programs, or multi-stakeholder activities that—

(i) promote or are related to the privacy of individuals who use or are affected by the Internet of Things;

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

(iii) may protect users of the Internet of Things; and

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

(E) the opportunities and challenges associated with the use of Internet of Things technology by small businesses; and

(F) any international proceeding, international negotiation, or other international matter affecting the Internet of Things to which the United States is or should be a party.
(3) MEMBERSHIP.—The Secretary shall appoint to the steering committee members representing a wide range of stakeholders outside of the Federal Government with expertise relating to the Internet of Things, including—

(A) information and communications technology manufacturers, suppliers, service providers, and vendors;

(B) subject matter experts representing industrial sectors other than the technology sector that can benefit from the Internet of Things, including the transportation, energy, agriculture, and health care sectors;

(C) small, medium, and large businesses;

(D) think tanks and academia;

(E) nonprofit organizations and consumer groups;

(F) security experts;

(G) rural stakeholders; and

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

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

(5) INDEPENDENT ADVICE.—

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

(B) SUGGESTIONS.—The working group
may suggest topics or items for the steering
committee to study, and the steering committee
shall take those suggestions into consideration
in carrying out the duties of the steering com-
mittee.

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

(6) TERMINATION.—The steering committee
shall terminate on the date on which the working
group submits the report under subsection (f) un-
less, on or before that date, the Secretary files a new
charter for the steering committee under section 9(c)
of the Federal Advisory Committee Act (5 U.S.C.
App.).

(f) REPORT TO CONGRESS.—
(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the working group shall submit to Congress a report that includes—

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

(B) the report submitted by the steering committee under subsection (e)(4), as the report was received by the working group;

(C) recommendations for action or reasons for inaction, as applicable, with respect to each recommendation made by the steering committee in the report submitted under subsection (e)(4); and

(D) an accounting of any progress made by Federal agencies to implement recommendations made by the working group or the steering committee.

(2) COPY OF REPORT.—The working group shall submit a copy of the report described in paragraph (1) to—

(A) the Committee on Commerce, Science, and Transportation and the Committee on Energy and Natural Resources of the Senate;
(B) the Committee on Energy and Commerce of the House of Representatives; and

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

SEC. 5. ASSESSING SPECTRUM NEEDS.

(a) IN GENERAL.—The Commission, in consultation with the National Telecommunications and Information Administration, shall issue a notice of inquiry seeking public comment on the current, as of the date of enactment of this Act, and future spectrum needs to enable better connectivity relating to the Internet of Things.

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

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

(2) if adequate spectrum is not available for the purposes described in paragraph (1), how to ensure that adequate spectrum is available for increased demand with respect to the Internet of Things;

(3) what regulatory barriers may exist to providing any needed spectrum that would support uses relating to the Internet of Things; and
what the role of unlicensed and licensed
spectrum is and will be in the growth of the Internet
of Things.

(c) REPORT.—Not later than 1 year after the date
of enactment of this Act, the Commission shall submit to
the Committee on Commerce, Science, and Transportation
of the Senate and the Committee on Energy and Com-
merce of the House of Representatives a report summa-
rizing the comments submitted in response to the notice
of inquiry issued under subsection (a).