CENTER FOR DATA INNOVATION

March 13, 2017

Attn: IOT RFC 2017
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue NW, Room 4725
Washington, DC 20230

On behalf of the Center for Data Innovation (datainnovation.org), we are pleased to submit these comments in response to the National Telecommunications and Information Administration's (NTIA) request for comments on its green paper titled "Fostering the Advancement of the Internet of Things."[1]

The Center for Data Innovation is the leading think tank studying the intersection of data, technology, and public policy. With staff in Washington, DC and Brussels, the Center formulates and promotes pragmatic public policies designed to maximize the benefits of data-driven innovation in the public and private sectors. It educates policymakers and the public about the opportunities and challenges associated with data, as well as technology trends such as predictive analytics, open data, cloud computing, and the Internet of Things. The Center is a non-profit, non-partisan research institute affiliated with the Information Technology and Innovation Foundation.

The Internet of Things offers many opportunities to grow the economy and improve quality of life. Just as the public sector was instrumental in enabling the development and deployment of the Internet, it should play a similar role to ensure the success of the Internet of Things by addressing challenges the private sector alone cannot solve. In its green paper, NTIA correctly identified many of the ways in which the federal government should support the private sector to accelerate the development and deployment of the Internet of Things. NTIA should develop a national strategy for the Internet of Things to coordinate these efforts throughout the federal government and maximize their effectiveness.

Please find our responses to the relevant questions in the attached document.

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[1] "The Benefits, Challenges, and Potential Roles for the Government in Fostering the Advancement of the Internet of Things," National Telecommunications and Information Administration, January 13, 2017, https://www.federalregister.gov/documents/2017/01/13/2017-00720/the-benefits-challenges-and-potential-roles-for-the-government-in-fostering-the-advancement-of-the.

Sincerely,

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1) IS OUR DISCUSSION OF IOT PRESENTED IN THE GREEN PAPER REGARDING THE CHALLENGES, BENEFITS, AND POTENTIAL ROLE OF GOVERNMENT ACCURATE AND/OR COMPLETE? ARE THERE ISSUES THAT WE MISSED, OR THAT WE NEED TO RECONSIDER?

The green paper correctly makes a strong argument for substantial government involvement with the Internet of Things to help the private sector overcome challenges and maximize the social and economic benefits of the technology. In particular, the green paper includes many constructive recommendations for ways the government can grow the Internet of Things, such as by being a leading adopter of the technology and coordinating with the private sector to build partnerships and support private-sector led standards development.[2] Additionally, the green paper identifies several ways that policymakers can remove barriers to the private sector's development and deployment of the Internet of Things, such as by creating an innovation-friendly regulatory environment devoid, of unnecessary rules, and resisting international efforts to limit the free flow of data across borders.

(2) IS THE APPROACH FOR DEPARTMENTAL ACTION TO ADVANCE THE INTERNET OF THINGS COMPREHENSIVE IN THE AREAS OF ENGAGEMENT? WHERE DOES THE APPROACH NEED IMPROVEMENT?

There are many steps the federal government can take to expand its own adoption of the Internet of Things. The Department of Commerce can lead this change by demonstrating best practices to other changes. For example, the Department of Commerce already employs a chief data officer who is helping the department develop the necessary technical infrastructure to make effective use of data generated by the Internet of Things. In addition, the Department of Commerce should develop an IoT action plan to identify how it will use IoT solutions to cut costs and improve services across its various agencies. Finally, the Department of Commerce should consider expanding the Commerce Data Service to include an "IoT Corps"—a team of government workers who can be assigned to work on high-impact IoT projects for the government.

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[2] For more on this topic, please see Daniel Castro, Joshua New, and Alan McQuinn, "How Is the Federal Government Using the Internet of Things?" Center for Data Innovation, July 25, 2016, http://www2.datainnovation.org/2016-federal-iot.pdf.

(3) ARE THERE SPECIFIC TASKS THAT THE DEPARTMENT SHOULD ENGAGE IN THAT ARE NOT COVERED BY THE APPROACH?

While the green paper outlines some important initiatives to improve cybersecurity for the Internet of Things, it does not address the underlying problem that most consumers do not have enough information to determine if the IoT products and services they are purchasing are secure.[3] While most companies publish privacy policies explaining how they collect and use information, they do not publish security policies describing how they protect this information. Without this information, consumers (or tech-savvy reporters or consumer advocacy groups) cannot easily differentiate between secure and insecure products, and companies do not fully reap the benefits of additional investments in security. While it would take an act of Congress to require companies to disclose this information, some companies may voluntarily begin to disclose this information. But to do so efficiently, they would benefit from best practices on how to report this information. To that end, NTIA should create a multistakeholder working group to develop best practices for disclosing to consumers' security practices in IoT devices and services.

(4) WHAT SHOULD THE NEXT STEPS BE FOR THE DEPARTMENT IN FOSTERING THE ADVANCEMENT OF IOT?

The green paper found that many commenters expressed strong support for a national strategy for the Internet of Things, and no commenters opposed this idea.[4] A national strategy for the Internet of Things, if designed and implemented correctly, would maximize the opportunity for the Internet of Things to deliver substantial social and economic benefits. The United States will not successfully capture these benefits by leaving the development of the Internet of Things solely up to the market, just as no government actions could capture all of the potential benefits without a robust private sector that can innovate unencumbered by overly restrictive regulations.[5]

The green paper stated that the Department of Commerce would defer to future policymakers to decide whether to implement a national strategy for the Internet of Things.[6] Given the

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[3] Daniel Castro, "How Congress Can Fix 'Internet of Things' Security," The Hill, October 28, 2016, http://thehill.com/blogs/pundits-blog/technology/303302-how-congress-can-fix-internet-of-things-security.

[4] "Fostering Advancement of the Internet of Things," U.S. Department of Commerce, January, 2017, https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf.

[5] Joshua New and Daniel Castro, "Why Countries Need National Strategies for the Internet of Things," Center for Data Innovation, December 16, 2015, http://www2.datainnovation.org/2015-national-iot-strategies.pdf.

[6] "Fostering Advancement of the Internet of Things," U.S. Department of Commerce, January, 2017, https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf.

widespread support for a national strategy and NTIA's conclusion that there is a valuable and necessary role for the federal government to play in supporting the Internet of Things, the Department of Commerce should begin developing this strategy.