March 10, 2017

Re: Internet Society's comments on the NTIA's Green Paper: Benefits, Challenges, and Potential Roles for the Government in Fostering the Advancement of the Internet of Things

Docket No. 170105023–7023–01

The North American Regional Bureau of the Internet Society welcomes the opportunity to submit its views on the United States National Telecommunications and Information Administration (NTIA) Green Paper: Fostering the Advancement of the Internet of Things that was released on January 12, 2017.

As a non-governmental organization with more than 80,000 individual and 143 organizational members in over 150 countries, the Internet Society serves to assure the beneficial, open evolution of the global Internet and its related internetworking technologies. The Internet Society is also the organizational home of the Internet Engineering Task Force (IETF). One of the IETF's leadership bodies, the Internet Architecture Board, has independently submitted a response to this Request for Comment.

In particular, the Internet Society is commenting on Question 1 in Appendix B:

"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 addresses a number of the major factors concerning a "secure, stable and trustworthy future of the Internet of Things," including the following:
- Its potential ubiquity and scale.
- The potential intimacy of the Internet of Things in daily life.
- The cross-disciplinary impact. That is, the paper considers the impact of the Internet of Things in smart cities and on first responders and law enforcement, as well as consumer-level impacts.
- The role of the government as an enabler of potential economic benefits.
- The importance of a security- and risk-based approach.

However, the Internet Society believes that two important issues that were not addressed in the Green Paper also merit consideration:
1. The economics of privacy and personal data up to this point in time have not generally worked to the maximum benefit of the consumer, particularly with regard to the monetization of personal data. The Internet of Things' impact on consumer privacy is unique, as it represents a massive increase in the raw material available to that

economic engine. While Section 4B (ii) Privacy reports the comments on security, privacy and scale, we are concerned that the Green Paper does not give sufficient weight to the economic impetus behind data monetization and the resulting risks to consumers and citizens. Of particular concern to the Internet Society is the efficacy of existing privacy and data protection policies in light of the incredible amount of data that can be collected with the Internet of Things, and the increasing capacity to analyze that data. Security breaches and mass surveillance programs further amplify our concerns. The Internet Society therefore requests that further consideration be given to the dynamic economics of consumer data, including legal and ethical consideration, presented by the deployment of the Internet of Things.

2. There are instances where data may be generated through a partnership between the public and private sector. For example, a city may engage commercial partners to implement a 'smart parking' system. In such a case, will the Internet of Things-generated data from the public sector be available to, or in some way be comingled with, the data from the commercial sector? How will a separation of that data be accomplished in an effective and demonstrable manner? Would the resulting data about citizens' movements, payments and vehicles fall under 'public sector' or 'commercial' data?

The Internet Society appreciates the opportunity to submit these comments on the NTIA's Green Paper on Benefits, Challenges, and Potential Roles for the Government in Fostering the Advancement of the Internet of Things. We would be pleased to answer any questions you may have and to participate in further discussions on this important issue.