Comments submitted to the National Telecommunications and Information Administration in the Matter of:

Green Paper: Fostering the Advancement of the Internet of Things

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Executive Summary

The Niskanen Center wishes to express its support for the Department of Commerce’s reaffirmation of the principles of the Clinton Administration’s Framework for Global Electronic Commerce. This document’s guidance will serve the Department well in addressing the many questions surrounding the appropriate role for government to play in regulating the Internet of Things, as well as other new emerging technologies.

However, we believe the Department should go further. Its next steps should involve actively advocating for other regulatory bodies to embrace these same principles. A unified government policy on how best to address emerging technologies would have an immensely beneficial impact on market certainty across numerous sectors of the economy, and ensure society continues to reap the benefits of rapid innovation and technological progress. The Department is well-positioned to be a leader on crafting a new regulatory approach to policy questions surrounding emerging technologies. Other agencies would benefit greatly from embracing these same principles, including the general regulatory process of industry-led standards and multistakeholder fora serving as primary avenues for regulatory action.
Introduction

The Niskanen Center is heartened by the National Telecommunications and Information Administration’s (NTIA) reaffirmation of support for *The Framework for Global Electronic Commerce*, originally developed under the Clinton Administration to address the emerging policy issues related to the Internet and an increasingly interconnected world.¹ As we noted in comments to NTIA in May 2016:

> Many of the concerns about the [Internet of Things] are similar to, if not the same as, those about the early Internet. The Clinton Administration wisely abstained from imposing ex ante regulations on the Internet. As a result, the Internet was able to evolve and mature according to the needs, demands, and concerns of innovators and entrepreneurs, consumers, and a wide array of other stakeholders.²

We are happy to see that the Agency recognizes the value of these timeless principles, and hope they will serve to help grow the Internet of Things (IoT) as effectively as they have the Internet. In response to NTIA’s calls for comments on its recent green paper—*Fostering the Advancement of the Internet of Things*—we wish to offer our support for the reaffirmation of the principles of *The Framework for Global Electronic Commerce*, as well as respond to the Agency’s questions regarding next steps.

In particular, we will broadly respond to question #3 (“Are there specific tasks that the Department should engage in that are not covered by the approach?”) and question #4 (“What should the next steps be for the Department in fostering the advancement of the IoT?”).³ The Department of Commerce’s (DOC) next steps should involve a continued embrace of industry-led standards and a multistakeholder-driven approach to governing developments in IoT policy. In addition, the one specific task the Department ought to engage in that is not currently covered in the green paper should be to advocate for other federal agencies to embrace similar principles when confronted with

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¹ The Department of Commerce, Internet Policy Task Force and Digital Economy Leadership Team, “Fostering the Advancement of the Internet of Things,” January 12, 2017, p. 11, https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf. (“Dating back at least to the 1997 Framework for Global Electronic Commerce, the U.S. Government has been operating under the principle that the private sector should lead in digital technology advancement. Even where collective action is necessary, the U.S. Government has encouraged multistakeholder approaches and private sector coordination and leadership where possible. When governmental involvement is needed, it should support and enforce a predictable, minimalist, consistent, and simple legal environment for commerce.”)


issues related to emerging technologies, including, but not limited to, commercial unmanned aerial systems (UAS) and autonomous vehicles.

The Framework for Global Electronic Commerce: Guiding Principles for Regulating Emerging Technologies

The Agency’s commitment to the tenets of the Framework for Global Electronic Commerce is notable given the extent to which those principles are reiterated throughout the green paper. In the “Crafting Balanced Policy and Building Coalitions” section of the green paper, NTIA’s “planned activities” opens by specifically reaffirming “its commitment to the policy approach that has made the United States the leading innovation economy ... reflected in the 1997 Framework for Global Electronic Commerce.”

In its “proposed next steps,” the paper goes on to state that the DOC will:

Continue to foster an enabling environment for IoT technology to grow and thrive, allow the private sector to lead, and promote technology-neutral standards and consensus-based multistakeholder approaches to policy making at local, tribal, state, federal, and international levels on issues ranging from U.S. security and competitiveness to cybersecurity, privacy, intellectual property, the free flow of information, digital inclusion, interoperability, and stability related to the IoT.5

We believe this is exactly the right tenor for DOC to take towards the IoT. By reaffirming the long-standing government policies promulgated by the Clinton Administration, NTIA and DOC have helped put the IoT on a path to success. In particular, we applaud the Department’s commitment to “[e]ncouraging private sector leadership in technology and standards development,” while embracing the “multistakeholder approach to policy making.”6 These two approaches have had historic success in reinforcing a moderate, innovation-friendly approach to addressing emerging technologies. Moving forward, it will be increasingly imperative that DOC, NTIA, and other federal agencies commit to refining this process, while embracing a degree of institutional deference to non-federal stakeholders in driving these regulatory processes.

Embracing Industry-led Standards

In the “Promoting Standards and Technology Advancement” section of the paper, the agency explicitly “agrees with commenters that an industry-led, bottom-up, consensus-based approach to standards development is necessary to realize the benefits of the” IoT.7 And NTIA’s “planned activities” leads by once again stating its commitment to fostering “an industry driven, private

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4 The Department of Commerce, “Fostering the Advancement of the Internet of Things,” 40.
5 Ibid. 42-43.
6 Ibid. 2.
7 Ibid. 47.
sector-led consensus-based approach to standards development.” The “proposed next steps” drives home the DOC’s focus on this perspective, and notes that the Department will “[a]dvocate for industry-led, consensus-based, international standards for IoT technologies and applications in its bilateral and multilateral engagements.” This is an appropriately tailored approach, and we wholeheartedly support the Department’s perspective on these matters.

If given the necessary breathing room, private industry stakeholders are well-positioned to apply unique, specialized knowledge to the creation of standards and best practices that can address public interest concerns. Third parties can serve as watchdogs and certifiers in ensuring compliance with industry-approved guidelines. Additionally, nonprofits and civil society organizations can play a vital role in contributing to the development of guidance documents that inform best practices. There are many examples of these approaches currently in practice or development, including the Online Trust Alliance’s IoT Trust Framework,10 Securing America’s Future Energy’s “Commission on Autonomous Vehicles Testing and Safety,”11 and NTIA’s own multistakeholder-driven “Voluntary Best Practices for UAS Privacy, Transparency, and Accountability.”

This last document is of particular note, as it shows how regulators can be an effective force for mediating a consensus-based set of standards without unduly burdening innovators and entrepreneurs. Although the private sector should invariably lead on the creation of technical standards addressing potential issues with emerging technologies, the multistakeholder process, as convened by federal regulators, is an important next-step in the overall process of integrating new technologies and innovations into the domestic market.

Committing to the Multistakeholder Process

The multistakeholder process has proven to be an exceptionally resilient method for addressing the regulatory issues facing emerging technologies. This “soft law” approach provides numerous benefits that a more prescriptive rules-based approach cannot match, most notably in its responsive flexibility. It unburdens regulators from bearing the full weight of decision-making—especially with regards to technical issues the Agency may not be capable of addressing given its limited resources—while involving a wide array of parties with unique policy insights and interests. Retaining a flexible multistakeholder engagement process will be key for appropriately addressing emergent concerns in both the IoT and other emerging technology issues on the horizon.

8 Ibid. 47.
9 Ibid. 48.
Perhaps the most valuable role of this process, however, is its ability to help inform a robust review of industry-led best practices and standards. Permitting the private sector to lead on establishing and implementing standards, while retaining general consensus-based multistakeholder procedures for reviewing those standards, is key for maintaining the necessary regulatory elasticity for complex emerging policy issues like the IoT.

**Supporting an Interagency Affirmation of Principles**

Despite our support for the Agency’s perspective, there is one area we believe DOC and NTIA can lead on, yet was left largely unaddressed in the green paper. Specifically, we believe the Department is well-situated to advocate for the Framework for Global Electronic Commerce to be used, applied, and reaffirmed by other federal agencies in assessing the viability of regulations for new emerging technologies. Using the Framework as an intellectual basis for considering regulatory approaches to emerging technologies can be beneficial not only to DOC and NTIA, but to other agencies as well. The Department should recognize the significant role it can play in shaping the application of these principles throughout the federal government. By leveraging its position as a federal stakeholder, NTIA and DOC can help ensure the Framework’s principles are promulgated beyond its jurisdictional borders.

**Conclusion**

Rapid advances in technology will continue outpacing the ability for regulators to respond expediently and effectively. Government regulators will increasingly need to optimize their regulatory approach to conform with an ever-optimizing economy. The regulatory system was constructed for an analog age; what we need now is a system that matches the flexibility and speed of the digital era. The Framework for Global Electronic Commerce can help inform that new system, and NTIA and DOC can be at the forefront of leading that reformation, by continuing to embrace the flexibility afforded by

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13 We note this was “largely” unaddressed because NTIA did make a point of noting that it would “[a]dvocate for industry-led, consensus-based, international standards for IoT technologies and applications in its bilateral and multilateral engagements.” That explicit mention, however, focused solely on the Agency’s international engagement, and did not address domestic interagency advocacy and engagement. See The Department of Commerce, “Fostering the Advancement of the Internet of Things,” p. 48.

14 See generally Ryan Hagemann, “New Rules for New Frontiers: A Regulatory Manifesto for Emerging Technologies,” Niskanen Center, January 30, 2017, [https://niskanencenter.org/blog/new-rules-new-frontiers-regulatory-manifesto-emerging-technologies/](https://niskanencenter.org/blog/new-rules-new-frontiers-regulatory-manifesto-emerging-technologies/). (In particular, we argue for a process flow that tracks roughly to the following proto-manifesto: “Governance of new, untried and untested technologies should begin with industry issuing standards and best practices. A multistakeholder review process—facilitated but not dictated by the appropriate federal agency—should follow, with clear process guidelines and objective goals and deliverables. This process should in no way be predicated on a presumption of regulatory action, but merely serve as a forum for discussion. Public comments should be sought throughout the process. During this time, firms should be granted a default approval to continue operating. Regulators should observe-and-respond to ongoing developments, proposing new rules only if a risk-based assessment warrants further action.”)

the current process while being a forceful advocate for these principles within the federal government.

We thank NTIA for the opportunity to comment on its green paper and look forward to continued productive engagement on this and other issues.