July 17, 2018

Fiona Alexander
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue NW, Room 4725
Washington, DC 20230

Dear Ms. Alexander,

On behalf of the Center for Data Innovation (datainnovation.org), we are pleased to submit comments in response to the National Telecommunications and Information Administration's (NTIA's) request for comments on international Internet policy priorities.[1]

The Center for Data Innovation is the leading think tank studying the intersection of data, technology, and public policy. With staff in Washington, D.C., 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.

NTIA SHOULD SUPPORT THE DATA ECONOMY, ESPECIALLY IN INTERNATIONAL POLICY DEBATES

Given the importance of the data economy, the U.S. government should be the leading voice in international policy debates about the benefits and opportunities of data-driven innovation. There are three principle areas where the U.S. government, and in particular NTIA, can play a role in advocating for innovation-friendly policies for the data economy.

OPPOSE UNNECESSARY RESTRICTIONS ON HOW ORGANIZATIONS USE DATA

The United States should serve as a counterweight to countries that are pursuing initiatives that impose unnecessary restrictions on how organizations use data. First, some countries are creating restrictive rules on how organizations collect, share, and use data. For example, the European Union

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[1] "International Internet Policy Priorities," Federal Register, June 12, 2018, https://www.federalregister.gov/documents/2018/06/12/2018-12613/international-internet-policy-priorities.

has enacted the General Data Protection Regulation (GDPR), and advocates for similar policies globally. The GDPR imposes restrictions not only on European companies, but also on American ones doing business in the EU, thereby limiting the economic and social benefits data can offer.[2]

Second, some countries have pursued policies requiring organizations to store certain types of data domestically.[3] Some policymakers mistakenly believe that data is more secure and private when confined within national borders, while others pursue these data localization policies purely for protectionist reasons. Regardless of the justification, these policies damage both the global economy as well as the nations that enact them as companies in nearly every sector of the modern economy depend on the free flow of data across borders to do business.[4]

PROMOTE U.S. INTERESTS IN THE INTERNET OF THINGS AND SMART CITIES

NTIA should advocate for policies that support U.S. interests related to the Internet of Things (IoT), which is expected to contribute up to $11 trillion in value per year to the global economy by 2025.[5] The Internet of Things is subject to a number of market failures, such as chicken-and-egg dynamics, which make the success of some IoT applications dependent on the success of other technologies.[6] For example, the value proposition for connected vehicles is higher if vehicles can communication with infrastructure, such as parking meters and traffic signals. If left unaddressed, these market failures can slow the technology's progress.

NTIA can take several steps on the international stage to promote digital adoption and address these market failures. First, NTIA should support the development of voluntary, industry-led standards and oppose nation-specific standards.[7] NTIA, which often represents the U.S. government in international Internet policy forums, should also push back on IoT-related data localization policies, such as those

[2] Nick Wallace and Daniel Castro, "The Impact of the EU's New Data Protection Regulation on AI," Center for Data Innovation, March 26, 2018, http://www.datainnovation.org/2018/03/the-impact-of-the-eus-new-data-protection-regulation-on-ai/.

[3] Nigel Corey, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?" Information Technology and Innovation Foundation, May 2017, http://www2.itif.org/2017-cross-border-data-flows.pdf.

[4] Ibid.

[5] James Manyika et al., "Unlocking the Potential of the Internet of Things," McKinsey Global Institute, June 2015, http://www.mckinsey.com/insights/business_technology/the_internet_of_things_the_value_of_digitizing_the_physical_world.

[6] 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.

[7] Ibid.

in India requiring servers supporting IoT applications to be based domestically.[8] Finally, NTIA should continue its multi-stakeholder efforts to address important policies issues related to the Internet of Things, such as addressing cybersecurity issues related to connected devices and promoting civic technology projects.

In addition, NTIA can support U.S. initiatives to establish itself as a leader in smart cities. While smart cities are fundamentally a municipal endeavor, the federal government has a valuable role to play in accelerating the adoption of the Internet of Things within cities, as local governments face many obstacles that they are unlikely to be able to address on their own.[9] Cities could benefit immensely from developing interoperable systems and sharing data with one another but often lack the capacity to coordinate this across national boundaries. NTIA can help cities overcome this challenge by encouraging the adoption of common technical standards that enable a "plug and play" approach to smart city development.[10] Regarding communities of practice, smart city management and data-driven governance are significant changes from the normal way of doing things, and cities and communities need to be able to easily learn and share their successes and failures. Without systems to share this knowledge, progress will slow and cities will repeat each other's mistakes. NTIA can help cities address this challenge by encouraging the development and adoption of smart city performance metrics to allow comparisons of cities' performance using common criteria; and fostering collaboration and coordination in the smart city ecosystem to facilitate inter-city learning and reduce knowledge sharing barriers impeding the growth of smart cities.[11] NTIA should also support the development and distribution of common smart city applications and tools to make it easier for cities to take advantage of smart city technologies so that cities without the resources to develop these tools themselves can still capture the benefits smart cities can offer.

OPPOSE EFFORTS AT GLOBAL REGULATION OF ARTIFICIAL INTELLIGENCE

Many national governments have expressed support for developing global regulations for AI. At the 2016 meeting of G7 Information and Communications Technology (ICT) ministers, Japan called for establishing basic rules for AI.[12] A year later in Italy, G7 ICT ministers declared the importance

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[8] "National Telecom M2M Roadmap," Ministry of Communications & Information Technology, May 2015, http://www.dot.gov.in/sites/default/files/u10/National%20Telecom%20M2M%20Roadmap.pdf.
[9] Joshua New, Daniel Castro, and Matt Beckwith, "How National Governments Can Help Smart Cities Succeed," Center for Data Innovation, October 30, 2017, http://www2.datainnovation.org/2017-national-governments-smart-cities.pdf.
[10] Ibid.
[11] Ibid.
[12] "Japan Pushes for Basic AI Rules at G-& Tech Meeting," *The Japan Times*, April 29, 2016, https://www.japantimes.co.jp/news/2016/04/29/national/japan-pushes-basic-ai-rules-g-7-tech-meeting/.

of "exploring multi-stakeholder approaches to policy and regulatory issues" associated with AI.[13] More recently the European Group on Ethics in Science and New Technologies (EGE), an advisory body for the European Commission, called for creating "a common, internationally recognized ethical and legal framework for the design, production, use and governance of artificial intelligence." And the European Economic and Social Committee, which advises the European Parliament, recommended that the European Union should establish "clear global policy frameworks for AI."[14] However these proposals and others like them fail to justify why AI warrants binding international rules. Moreover, most proposals do not offer specifics, and those that do are typically unworkable from a regulatory perspective. And countries pushing for these proposals often view AI through the lens of the "precautionary principle" and would shape regulation accordingly, leading to limited innovation.[15] Just as NTIA played a crucial role in protecting the Internet from attempts by other countries to apply heavy-handed regulation in its early days, thereby allowing continued innovation and economic growth, NTIA should strongly rebuke such calls for global governance of AI. Instead, NTIA should encourage other countries to work with industry to address concerns and influence the development of the AI by being early adopters.[16]

To the extent that new regulations for AI are warranted, NTIA should advocate for countries to individually adopt regulatory frameworks based on algorithmic accountability, the principle that an algorithmic system should employ a variety of controls to ensure the operator can verify it acts in accordance with its intentions, as well as identify and rectify harmful outcomes.[17] Encouraging individuals nations to adopt this framework would both promote the vast benefits of algorithmic decision-making and minimize harmful outcomes, while also ensuring laws that apply to human decisions can be effectively applied to algorithmic decisions.[18]

CONCLUSION

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[13] "G7 Multistakeholder Exchange on Human Centric AI for Our Societies," G7 ICT and industry Minister's Declaration 2017, September 26, 2017, http://www.g7italy.it/sites/default/files/documents/ANNEX2-Artificial_Intelligence_0.pdf.
[14] "Statement on Artificial Intelligence, Robotics and 'Autonomous' Systems," European Group on Ethics in Science and New Technologies, March 2018, http://ec.europa.eu/research/ege/pdf/ege_ai_statement_2018.pdf.
[15] Joshua New, "Calls for Global Governance of AI Miss the Mark," Center for Data Innovation, April 24, 2018, http://www.datainnovation.org/2018/04/calls-for-global-governance-of-ai-miss-the-mark/.
[16] Ibid.
[17] Joshua New and Daniel Castro, "How Policymakers Can Foster Algorithmic Accountability," Center for Data Innovation, May 21, 2018, http://www2.datainnovation.org/2018-algorithmic-accountability.pdf.
[18] Ibid.

Many other countries are more preoccupied with protecting against the potential harms of new data-driven technologies rather than accelerating adoption to capture their known benefits. The U.S. government, with NTIA playing a central role, should work towards building an international coalition that can champion policies that will advance adoption and use of these technologies globally. The United States has much to gain by enabling data-driven innovation within its borders, but it stands to benefit even further with the support of other countries sharing data with one another, collaborating to develop and deploy the Internet of Things, and accelerating the development and use of AI.

Sincerely,

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