Before the
DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS
AND INFORMATION ADMINISTRATION

In the Matter of	)	
	)	Docket No. 180124068-8068-01
International Internet Policy Priorities	)	

COMMENTS OF VERIZON

The National Telecommunications and Information Administration (NTIA) correctly recognizes "the vital importance of the internet and digital communications to U.S. innovation, prosperity, education, and civic and cultural life."[1] NTIA has made growth and innovation in these technologies a cornerstone of its mission. In continuing to advocate for a globally accessible interoperable internet, NTIA should encourage the free flow of information across borders; engage multiple stakeholders in developing internet policy; promote strong, industry-led privacy policies and cybersecurity risk-management practices; and focus on deployment and development of new and innovative technologies. NTIA can advance these goals through discussions with other countries and participation in organizations such as the Organization for Economic Cooperation and Development (OECD), the Asia Pacific Economic Cooperation (APEC) forum, and the International Telecommunication Union (ITU).

Verizon is one of the world's leading providers of communications, information, and entertainment products and services to consumers, businesses, and governmental agencies. We offer voice, data, and video services and solutions on our wireless and wireline networks that are designed to meet customers' demand for mobility, reliable network connectivity, security, and

[1] *See International Internet Policy Priorities*, Notice of Inquiry, Docket No. 180124068-8068-01, RIN 0660-XC041, 83 Fed. Reg. 26036 (June 5, 2018) (*NOI*).

control. Operating on a global basis, Verizon provides services to enterprises including voice, data, and video communications products, and enhanced services, such as broadband video and data services, Internet of Things (IoT), corporate networking solutions, security, and managed network services. Throughout, we place paramount importance on privacy and security to protect our customers and our own core business.

Verizon supports NTIA's efforts to protect and promote an open and interoperable internet, advocate for the free flow of information, strengthen the global marketplace for American digital projects and services, and invest in emerging technologies.[2] United States businesses both large and small depend on the internet to serve their customers in global markets. As explained below, NTIA should continue to support growth and innovation by promoting the following principles relating to the four key topic areas described in the *NOI*:[3]

1. *The Free Flow of Information and Jurisdiction*: The free flow of information over the internet has fostered economic growth and development. Countries should avoid adopting data localization requirements that restrict the flow of data across borders since such policies can adversely affect businesses and hinder investment and economic growth.

2. *Multistakeholder Approach to Internet Governance*: The multistakeholder approach to internet policymaking has fostered the growth and success of the internet economy. Such an approach is most successful when there is a bottom-up, consensus-driven, transparent dialogue among stakeholders that incorporates a wide range of input from various parties.

3. *Privacy and Security*: Privacy regulations should be "smart and non-discriminatory," and strike the right balance between the need to protect data while also enabling innovation and growth.[4] These policies should be flexible enough to adapt to rapidly changing technology and to interoperate with global privacy regimes. With respect to cybersecurity, governments should avoid prescriptive, top-down approaches that impede innovation and the free flow of data.

4. *Emerging Technologies and Trends*: Policy discussions with other countries should emphasize the need to develop light-touch, flexible regulatory frameworks that support the development of emerging technologies and robust investment. These regulatory

[2] *See id*.
[3] *NOI* at 26037-38.
[4] *Id*. at 20637.

frameworks should also recognize differences in the needs of enterprise customers and mass-market retail service customers.

By promoting these principles, NTIA can better encourage continued growth of communications technology and the internet worldwide.

I. NTIA Should Encourage the Free Flow of Information Across Borders in Support of Global Business

The ability to use the internet to freely move information across borders is essential in the global marketplace. NTIA should therefore continue to develop and promote policies to discourage data localization.

NTIA correctly recognizes that "restrictions on the free flow of information are jeopardizing the economic, social, and educational opportunities provided by the internet."[5] Businesses across economic sectors rely on the internet to manage their operations and supply chains, and reach customers across the globe. Websites that used to be known as "digital storefronts" to reach local consumers have grown into "platform[s] for businesses to sell to customers domestically and overseas."[6] And the global reach of the internet to exchange information and services continues to expand. The United States exports over $2 trillion in goods and services annually, and the International Trade Administration (ITA) notes that there is "vast opportunity" for growth, estimating that 95 percent of the world's customers are outside of the United States.[7] Indeed, Cisco estimates that by 2021 there will be 4.6 billion global internet users

[5] *Id*.
[6] Joshua Meltzer, *Supporting the Internet as a Platform for International Trade: Opportunities for Small and Medium-Sized Enterprises and Developing Countries*, Global Economy and Development Working Paper 69, Brookings Institution at vi (2014), https://www.brookings.edu/wp-content/uploads/2016/06/02-international-trade-version-2_REVISED.pdf.
[7] U.S. Department of Commerce, *Export Planning, Why Export?*, https://www.export.gov/article?id=why-export (last visited July 3, 2018).

and over 27 billion devices will be connected to the internet.[8] United States businesses both large and small depend on the free flow of data to serve these customers and compete in this growing global marketplace.

To enable this free flow of data, NTIA should continue to work with other U.S. government agencies to develop policies to discourage data localization. Currently, a growing number of countries have proposed or adopted data localization regulations that require businesses to keep various types of data on local servers and maintain other computing facilities within their country.[9] These policies often are adopted to address seemingly legitimate concerns such as increasing online security and data privacy.[10]

In practice, however, data localization policies have a number of immediate negative impacts that outweigh the intended benefits.[11] First, many transformative technologies like cloud computing and network virtualization offer the greatest benefits to businesses and other users when they can store and manage data with locational flexibility and consistently strong security systems. Data localization diminishes access to such benefits, limiting the ability of companies to access and use relevant data they collect, which could diminish their ability to serve customers effectively, manufacture goods efficiently, and compete in a global marketplace. Second, data localization may impose undue costs on new and emerging competitors who are required to incur

[8] Cisco, *Visual Networking Index: Global Fixed and Mobile Internet Traffic Forecasts*, https://www.cisco.com/c/en/us/solutions/service-provider/visual-networking-index-vni/index.html (last visited July 3, 2018).
[9] We understand these countries to include Australia, China, Brazil, France, Germany, Greece, India, Indonesia, Kazakhstan, Malaysia, New Zealand, Nigeria, the Philippines, Russia, South Korea, Taiwan, Turkey, and Vietnam.
[10] *See NOI* at 26037.
[11] Matthias Bauer, Hosuk Lee-Makiyama, Erik van der Marel, and Bert Verschelde, *The Costs of Data Localisation: Friendly Fire on Economic Recovery*, European Centre for International Political Economy, ECIPE Occasional Paper No. 3/2014 at 3 (May 2014) ("ECIPE *Data Localization* Paper").

additional expenses to build and maintain facilities to store data locally. This could raise barriers to entry for new providers and limit consumer options. Third, the difficulties complying with data localization requirements may lead to substantial losses for businesses, and subsequent harms to consumers if providers cannot effectively compete. One analyst concludes that "any job gains as a result of data localization are miniscule compared to losses in terms of jobs and output in other parts of the economy."[12] Finally, these requirements may constrain consumers' ability to freely exchange information and ideas. Governments may use data localization measures to control data available to citizens, curb free expression, and prevent political dissent.

Beyond immediate effects on competition and consumers, data localization requirements may have significant longer term negative impact on investment and other economic activity. For example, the European Centre for International Political Policy (ECIPE) found that seven countries that proposed or enacted data localization legislation suffered a decrease in gross domestic product.[13] ECIPE found that these losses are attributable to the impact that data localization requirements have on all economic activity, and have "significantly affect[ed] post-crisis economic recovery and can undo the productivity increases from a major trade agreement[.]"[14]

NTIA should therefore continue to stress the importance of cross-border data flows to global commerce in meetings with other countries and before international organizations. NTIA should work with the OECD, ITU, and APEC, and advocate to encourage the free flow of data at the G7 and G20 forums and through international trade negotiations. Additionally, NTIA can

[12] *Id*.
[13] *See* ECIPE *Data Localization* Paper at 2, 3-4.
[14] *Id*. at 2. The seven countries studied by ECIPE that proposed or enacted legislation are Brazil, China, the European Union, India, Indonesia, Korea, and Vietnam.

encourage the U.S. government to include adoption of policies that encourage cross-border data flows when updating the North American Free Trade Agreement. The cross-border data flow provisions negotiated as part of the Trans Pacific Partnership remain a model for achieving these policy goals.

II. NTIA Should Continue to Strongly Advocate for the Multistakeholder Approach to International Internet Governance and Policy Development

NTIA should continue its long-standing leadership in the international use of the bottom-up, multistakeholder approach to internet governance and internet policy making. This approach creates an environment that facilitates a varied exchange of knowledge on emerging policy issues and is a key component in fostering an internet that can grow, thrive, and support innovative economies globally.

The multistakeholder approach to internet governance relies on three main components: open-ended innovation; decentralized governance institutions; and open and inclusive processes.[15] By providing a space where stakeholders can build consensus on a complex issue, the international community benefits from diverse perspectives and meaningful participation by a variety of subject-matter experts. Transparency within the process builds trust and allows for a fully informed dialogue.

NTIA has been a leader in supporting a multistakeholder approach to internet governance and policymaking. For example, NTIA has been a key participant in the Internet Corporation for Assigned Names and Numbers (ICANN) and the Internet Governance Forum (IGF), where it promoted the benefits of a multistakeholder approach to global internet policy issues. As a result of NTIA's active engagement, ICANN has implemented comprehensive and robust accountability

[15] The Internet Society, *Internet Governance: Why the Multistakeholder Approach Works* (2016), https://www.internetsociety.org/wp-content/uploads/2016/04/IG-MultiStakeholderApproach.pdf.

structures, as well as helped facilitate a smooth transition of stewardship for the Internet Assigned Names and Numbers (IANA) organization. NTIA's support for a multistakeholder approach also benefitted ICANN's Government Advisory Council (GAC), which relies on input from a diverse section of the global internet. This approach brought ICANN in-depth knowledge and expertise on the unique challenges their stakeholders face in promoting innovation and investment within their borders. In the future, NTIA should continue its strong participation in the GAC to help deliver the best possible input for ICANN and should encourage the GAC to take into account U.S. business as an important segment of the multistakeholder community.

Similarly, NTIA's support of the IGF has helped to build this multistakeholder venue for dialogue on internet policy. The IGF is often considered to be a "knowledge laboratory" with the ability to educate a broad multistakeholder population on emerging technology issues. However, the IGF faces many challenges related to funding, government participation, and areas for growth. Going forward, NTIA should take several actions to both improve and raise awareness of the IGF. First, NTIA can encourage a wider range of businesses to participate in the IGF. With the explosion of IoT and other new technology, many new areas of commerce are being impacted by internet issues, such as the automotive, financial, and health industries. NTIA can assist by explaining the benefit of the IGF to these industries and encouraging their participation in relevant discussions. Second, NTIA should encourage leaders from non-participating governments to attend and participate in the IGF. Increased participation will help to enrich the dialogue and improve the IGF's effectiveness. Third, NTIA can coordinate more closely with the IGF-USA, and potentially encourage more local multistakeholder participation to maximize the United States contribution to the global IGF organization.

III. NTIA Should Work to Ensure Compatible and Appropriate Privacy and Cybersecurity Regimes Globally

Ensuring privacy and cybersecurity is vital for consumer trust in the digital economy, and Verizon takes the privacy and security interests of its users very seriously. As highlighted above, it is vital for businesses and individuals to be able to send and receive data across borders. It is therefore critical for countries around the globe to strike the right balance between appropriately protecting privacy and enabling the use of data to allow for innovation. In light of the complex nature of privacy issues, it is essential for regulators to avoid establishing overly prescriptive privacy regimes that impede innovation and risk the free the flow of data. Countries should aim to create privacy regimes in which the same requirements would apply to all participants in the digital ecosystem—this would create opportunities for competition and unlock the power of innovation.

First, there has been growing worldwide interest in how to regulate privacy. Flexible regulation for new and emerging business models have greatly enabled the tremendous growth of the digital economy. But if countries come to different conclusions on the appropriate balance amongst privacy, security, economic growth and innovation, governments around the globe risk adopting conflicting requirements—and by doing so, among other things, creating restrictions on the flow of trans-border data. For example, the APEC Cross Border Privacy Rules System, promulgated in 2011, provided governments with a model for privacy principles, and it has been implemented as a formal structure by a growing number of economies. But the European Union has established the GDPR, and other privacy models are emerging in countries such as India and Brazil. Such inconsistent—or possibly conflicting—approaches to privacy risk confusing consumers and possibly limiting international competition and commerce.

To ensure that the world does not become fragmented into incompatible privacy regimes that undermine the internet ecosystem, governments must develop models with the ability to interoperate with other privacy regimes. Such privacy frameworks should be globally interoperable, based on internationally-recognized principles, apply consistently across the market, provide adequate privacy protection, and enable continued seamless flow of data across borders. NTIA should continue to work with the ITA, the Federal Trade Commission and the Department of State to promote robust, flexible and interoperable privacy regimes globally, such as the work being done to support and expand the APEC Cross Border Privacy Rules.

Second, cybersecurity continues to be a critical issue. Verizon takes cybersecurity seriously and is continually evaluating its security posture to ensure it is taking appropriate steps to secure its networks and services. As cybersecurity threats continue to evolve globally and as policy makers try to address these new challenges, cybersecurity policies should be flexible enough to recognize the rapidly evolving technology sector and quickly evolving cyber threat landscape. NTIA should promote the risk management approach to security encompassed by the National Institute of Standards and Technology (NIST) Cybersecurity Framework. The NIST framework strikes the proper balance between securing networks and enabling innovation and evolution by enabling businesses to tailor cybersecurity measures based on their own risk profiles and business models.

NTIA should also urge other countries and regulatory agencies to avoid prescriptive, top-down approaches that would make responding to cyber security challenges more complex and ultimately render systems more vulnerable to attack rather than responding to new threats. Security standards, thus, should be voluntary, industry-driven, and consensus-based engaging all

relevant stakeholders (including on a global basis in line with the nature of the threats). Indeed, companies may be in the best position to define their own global security processes and measures.

IV. NTIA Should Continue its Focus on Development and Deployment of New and Innovative Technologies Including 5G

NTIA's focus on enabling the deployment of new and innovative technologies will help the United States to continue to lead global technology development. Given the far-reaching opportunities offered by some emerging technologies, NTIA should work to promote a global sense of collaboration, experimentation, and openness to deliver the full benefits of the rapid expansion of innovative technologies. Since many different emerging technologies might achieve market success, NTIA's discussions with other countries should underscore the need to develop flexible policy frameworks that support the development of future innovation and related investment.

NTIA has already done significant work in this regard to foster the advancement of IoT, 5G, and Artificial Intelligence (AI), and has highlighted the benefits of these technologies to consumers and businesses alike. For example, NTIA has evaluated and promoted efficient use of spectrum to support development of next-generation wireless services in the United States. It has worked with the Federal Communications Commission and industry to promote sophisticated sharing of the 3.5 GHz band. Given the potential for global harmonization of mid-band spectrum for next generation services, NTIA should accelerate its review of the spectrum immediately adjacent to that band—3.45-3.55 GHz. And, working both with federal government stakeholders and with the Commerce Spectrum Management Advisory Committee, it should continue to look at ways to promote efficient use of spectrum by government users, particularly focusing on making underused spectrum available for commercial use. NTIA has also advocated policies to encourage

removing roadblocks to the deployment of the necessary infrastructure to support 5G. These efforts have cleared a path for continued development, investment, and growth.

Enterprise IoT applications, particularly those that strengthen industries such as manufacturing, agriculture, and infrastructure, can provide major value to the U.S. economy.[16] Technologies such as IoT, 5G, and AI are also poised to play a key role in accelerating the digitalization of the U.S. economy. 5G wireless service will enable this digitalization by accommodating the diverse connectivity needs of consumer and industrial applications (*e.g.*, high speed, low latency, resilience, ubiquity, etc.). To accelerate the deployment of innovative technologies beyond the United States, therefore, NTIA should encourage discussions that are ambitious, yet able to be implemented quickly in order to capitalize on the "window" of opportunity.

The full potential of these innovative technologies will only be realized through consistent and reasonable legal and regulatory frameworks. NTIA can help by promoting the following guiding principles that foreign governments can follow when considering the best policy approaches to promote, rather than hamper, innovative technologies.

A. Encourage Light-Touch Regulatory Frameworks to Allow Flexibility for Emerging Technologies

In the face of rapidly changing technologies, NTIA should support adoption of light-touch regulatory frameworks that allow flexibility for emerging technologies to flourish, and foster the development of stable pro-investment and pro-competition environments. Such frameworks benefit from regulatory simplification, which gives providers the ability to experiment with

[16] *See generally* Nick Ismail, *7 Industries that will be Radically Changed by the IOT*, InformationAge (July 12, 2017), https://www.information-age.com/7-industries-will-radically-changed-iot-123467258/ (last visited July 10, 2018).

emerging technologies and new services. Streamlining and updating regulatory restrictions can help providers update networks and services more efficiently or replace outdated technologies with new and more reliable ones with broader capabilities.[17]

B. Recognize the Differences Between Enterprise and Mass-Market Services

Regulatory frameworks should recognize the differences between enterprise and mass-market services. This is especially important since many emerging services—such as IoT and those anticipated for 5G—involve significant business-to-business arrangements. Enterprise services enable business and government enterprises to harness the power of high-speed and reliable data connections and storage tailored to their specific needs. Enterprise communications services are often combined with security, managed IT, and other services essential to modern business. These services ensure that multinational businesses with global operations can stay connected 24 hours a day, enabling continuous and uninterrupted services that contribute to competition and innovation.

Services that cater to enterprise customers are thus categorically different from those offered to mass-market retail service customers, such as residential subscribers. While mass-market retail customers usually select from a range of standard service offerings, enterprise customers often require a complex and specialized suite of services involving communications and non-communications products. As sophisticated entities, these customers often specifically negotiate customized terms and packages with a provider under a service level agreement, making

[17] For example, the Federal Communications Commission has been working to streamline the process for replacing legacy services and networks with more modern, reliable service offerings allowing customers to enjoy updated technology at competitive prices. *See*, *e.g.*, *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Second Report and Order, WC Docket No. 17-84, FCC 18-74 (June 8, 2018); *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC Rcd 11,128 (2017).

strict regulatory requirements unwarranted. Prescriptive registration, reporting, and auditing requirements used to protect mass-market subscribers may therefore be unnecessary—and even detrimental—applied to the enterprise market segment.

C. Support Industry-Driven Technical Standards That Encourage Interoperability

Emerging technologies will benefit from appropriate technical standards to drive interoperability. The ability to transfer information across systems, applications, or components in four broad areas—technological, data, human, and institutional—is vital. NTIA should encourage countries to abide by industry-driven standards that facilitate interoperability, foster investment, and increase competition.

NTIA should devote resources to encourage the development of industry-driven technical standards that support innovation and growth, including those relevant to the current evolution of the global 5G ecosystem. These standards should also leave room for variation and the use of proprietary standards and technologies, especially in the early days of innovative technologies.

D. NTIA Should Promote Innovation and Investment for Emerging Technologies in the OECD and ITU

NTIA should promote policies that accelerate the deployment of innovative technologies, including through engagement with government officials and international organizations such as the OECD and the ITU. The most effective organizations at producing useful international policy inputs will be those with an appropriate mandate that have structures and processes in place through which governments, industry, and relevant stakeholders can work together to seek solutions to issues raised by emerging technologies.

For example, the OECD has the ability to conduct wide-ranging outreach activities to non-member countries, businesses, and the public, in particular through workshops and global forum

events including with developing countries. With the expertise to develop balanced, evidence-based policy recommendations on emerging technologies, the OECD should be given priority as a venue for policy discussions and engagement. At the OECD most decisions require consensus among member governments and such consensus often serves as the basis to pursue specific negotiating goals in other international fora. OECD's promotion of free-flowing discussions and exchange of views has produced beneficial public policy recommendations. These discussions have also led to the development of use cases and best practices.

NTIA should also consider how the ITU may most be helpful. The ITU has been a global convener for a number of telecommunication and radio communication issues, but some entities have pushed to overly—and unduly—expand the ITU's existing mandate and core mission in ways that might promote regulatory models that impede investment and growth in the global digital economy.

The United States should ensure that the ITU is not engaging in policymaking related to topics beyond the scope of its mandate. In recent years, the ITU has attempted to address public policy issues related to cybersecurity, privacy, IoT and AI. These efforts are both duplicative of work by other stakeholders and generally outside of the ITU's areas of technical expertise. This year, the ITU will hold its quadrennial Plenipotentiary Conference that sets the agenda for the next four years of the ITU's work. At the Conference, the United States should support discussions and exchange of views in the ITU's Development Sector within the scope of the ITU's mandate that could lead to generating use cases and best practices for infrastructure deployment. These discussions could influence regulatory decisions globally that improve the investment climate, facilitate network deployments and upgrades, and provide much needed regulatory predictability sought by investors. All of this could be accomplished through the historic mandate of the ITU.

To respond to proposals for the ITU's expansion beyond the scope of its competency, the United States should identify the more appropriate stakeholders and venues that should engage in those discussions.

The United States is also considering what role the ITU Council's Working Group on International Internet-related Public Policy Issues should have going forward, and whether working group attendance should continue to be restricted to member states. We strongly support increased transparency and openness in the work of the ITU, keeping in mind its existing mandate, structure, and work programs. A transparent and open ITU operating within its core mandate will encourage continued involvement by industry in key areas. However, if some members are successful in expanding the mandate of the ITU through heavy-handed interventionist work programs, other options and venues should be considered.

CONCLUSION

NTIA's continued commitment to promote growth and innovation in communications technologies is vital to the global marketplace. To further that commitment, NTIA should continue to support flexible policies that encourage global collaboration to ensure the continued free flow of information over the internet.

Respectfully submitted,

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July 17, 2018