

4 June 2020

Ms. Aimee Meacham
Office of International Affairs
National Telecommunications and Information Administration
US Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

Re: Input on Proposals and Positions for the 2020 World Telecommunication
Standardization Assembly (Docket No. 200504-0126)

Dear Ms. Meacham:

Juniper Networks respectfully submits these comments regarding the above-captioned docket of the National Telecommunications and Information Administration (NTIA). At the World Telecommunications Standardization Assembly in India in November 2020, Juniper Networks recommends that NTIA advocate for the ITU Telecommunication Standardization Sector (ITU-T) to focus on its core priorities instead of addressing recent proposals not ripe for its formal consideration.

By way of background, Juniper Networks develops high-performance networking solutions spanning routing, switching, and security. We proudly consider ourselves as secure networking partners to governments, major enterprises, service providers, and cloud providers around the globe.

At the outset, Juniper appreciates the NTIA's efforts to advance international communications and information policies at the International Telecommunication Union (ITU). We believe that your participation at the 2020 World Telecommunication Standardization Assembly will

position the United States' information and communications technology industry to retain global leadership.

We understand that one proposal before the ITU-T that could be discussed at WTSA suggests a new paradigm for internet architecture. This proposal, known as New IP, recommends a top-down approach to how the internet is structured and governed; this would be a significant departure from its current, independent, and free-of-government structure.

Juniper recommends, for several reasons, that NTIA advocate for the ability of the ITU-T to focus on its core competencies instead of reviewing New IP. First, New IP is a research topic and not appropriate for standardization at this time. New IP offers three benefits as the primary justifications for the new network architecture: (1) interconnecting ManyNets; (2) deterministic forwarding; and (3) intrinsic security. The concept of ManyNets is a paradigm shift from the internet as we know it. It purports to ubiquitously connect massive quantities of physical devices and content, disaggregating the content from its hosts and specific locations. It is not clear exactly how the current internet would shift toward New IP, how any such changes would affect internet deployment and security, or what the state of internet governance would be. With respect to deterministic forwarding and intrinsic security, it is not yet understood why this capability is not or could not be deployed over the internet's current architecture. Absent at least some understanding of those critical details (which cannot be obtained without further research), WTSA discussion of New IP is premature.

Second, the proper venue for consideration of New IP is the IETF, not the ITU-T. As you are aware, the ITU-T membership consists significantly of nation-states. This adds a geopolitical edge to any issue that it considers; geopolitics are not a helpful ingredient in the development of internet standards. The IETF, on the other hand, is known among internet engineers and standards experts to be the primary body for internet standards. It even has before it on-going efforts regarding transport protocols and deterministic networking. It would make sense for the IETF to be the initial body to consider New IP, as well.

Third, WTSA should allow the ITU-T FG NET-2030 to complete its work and let the Study Groups analyze the results in relation to existing industry efforts. The studies underway in the FG NET-2030 could provide direction for development of technologies for monitoring to determine the need for standardization. The Study Groups should be permitted to evaluate the outcomes first.

For these reasons, Juniper Networks recommends that the NTIA not support recommendations for the ITU-T to consider New IP. Thank you for your consideration of these views. Should you require any further information, please feel free to contact me at (469) 682-9924 or rfarhoumand@juniper.net.

Sincerely,

Rouzbeh Farhoumand

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