DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Notice of Request for Public Comments on Risks in the Semiconductor Supply Chain Docket No. 210915–0189

COMMENTS OF AT&T SERVICES, INC.

AT&T Services, Inc., on behalf of itself and its affiliates (together, "AT&T"), welcomes the opportunity to provide comments in response to the *Request for Information (RFI)* in the above-referenced proceeding.

AT&T is a diversified, global leader in telecommunications, media and entertainment, and technology. AT&T does not manufacture, design, or produce semiconductors. Rather, AT&T purchases finished products from original equipment manufacturers ("OEMs") that contain integrated circuits. AT&T's supplier agreements, including performance deliverables, are subject to confidentiality and nondisclosure provisions, which constrains the level of detail we may provide in a public filing. We have, however, provided input to our trade associations' comments in response to this RFI. AT&T offers the following general insights about the impact of the chip shortage.

By many reports, the current chip shortage is not expected to recover before the second quarter of 2022 when additional foundry capacity is expected to come online in key markets. The growing constraints on the global supply of semiconductors is a critical issue that has the potential to affect many aspects of our society. Semiconductors are essential to continued American technology leadership. At our core, AT&T's mission is to keep customers and businesses securely connected to the people, applications, entertainment, and experiences that matters to them most. To do this, we build networks that heavily rely on semiconductors and

connect customers through devices that also rely on semiconductors. AT&T is aggressively investing in and deploying more robust, higher speed technologies like fiber and 5G – both of which require chips. In fact, between 2016 and 2020, AT&T invested more than \$110 billion in our wireless and wireline networks. That's more than any other public company in the United States during that time.

The COVID-19 Pandemic has changed the way that people work and communicate, leading to a shift in product demand from our customers and the introduction of new service delivery models. Over the last year and a half, we have had up to 130,000 AT&T employees working from home, and a 40% increase (year over year) in network usage – on an average day now, about 468 petabytes of data crosses our network. That's the equivalent of streaming nearly 100 million two-hour long movies in HD.

AT&T's complex supply chain is a key enabler of AT&T's offerings. Our supply chain network includes over 20,000 suppliers and 60+ distribution points. Resiliency in our supply chain has been a high priority given that shortages in any part of this supply chain can have a profound impact on our customers and network investment. We have thus focused on reducing risk in our supply chain by investing in automation and technology, prioritizing supplier and geographic diversity, building flexible fulfillment models, and improving visibility and georedundancy. Our resiliency building and mitigation planning include prioritizing the safety and security of labor workforce within the supply chain network; diversification of transportation modes, ports, carriers, suppliers, and source countries; making longer term purchase commitments to suppliers to ensure our planning for continued supply; increasing our own stock levels; and increasing accuracy of forecasts through partnerships across the supply chain. These efforts have enabled us to weather various disruptions over the years, including device recalls

and safety issues (2016), a shipping company bankruptcy (2017), electronic component shortages and Section 301 tariffs (2018), the Covid pandemic, and transportation challenges.

Nonetheless, we are now seeing changes occurring in the marketplace in response to the chips shortage such as prices increasing due to reduced supply. These are indicators of the market working as this helps to prevent hoarding and fosters allocation of scarce supply to highest value uses. We believe that flexible commercial operation of the market is better suited to address near-term supply chain challenges than top-down industrial policy or micromanagement of supply chains. As policymakers work to alleviate the shortages, it's important to avoid policies that favor specific industries in the allocation of chips or otherwise distort the marketplace. Preferential treatment for any one group or industry will only exacerbate the impacts on other critical industries. However, there are certain actions government can take to lessen the impact and increase chip production, we urge the US government to:

- Offer incentives to increase foundry capacity in the US or allies. We support
 congressional efforts to appropriate funds supporting the CHIPS for America Act.
- Consider building a strategic reserve of semiconductors in the event of future shocks.
- Publish best practices for supply chain risk management, including concepts such as geodiversity and firm order commitments modeled on widely accepted supply chain risk manage practices,
- Invest in training and retraining engineering talent that is required to run a semiconductor line which will be necessary and is in limited supply.
- Consider initiatives to boost competition in semiconductor manufacturing that will help grow and diversify the manufacturing base; and

• Look beyond semiconductors and consider strategies to help ensure a consistent supply of all key components that underpin the digital infrastructure. There is the potential for the same challenges we are seeing today with chips to occur in other critical areas – such as access to rare earth minerals and other components essential to manufacturing chipsets.

Semiconductor chips are fundamental to the communications sectors ability to connect people to work & learn both at home and on the go. We look forward to continuing to work with the Department of Commerce and the rest of government to address the ongoing shortages in the semiconductor product supply chain.

November 8, 2021