

# **Coalition of Services Industries (CSI) Comments Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation**

**Docket Number USTR-2018-0026  
September 6, 2018**

The Coalition of Services Industries (CSI) appreciates the opportunity to submit comments to assist the Office of the United States Trade Representative (USTR) on the proposed additional 10-25 percent duty on \$200 billion worth of U.S. imports from China, pursuant to the Section 301 investigation into China's actions, policies, and practices related to technology transfer, intellectual property, and innovation. This written statement highlights the importance of the services trade relationship between the United States and China and addresses how imposing increased duties on particular products listed in the Annex is an ineffective means to obtain the elimination of China's acts, policies, and practices. It also explains why escalating the imposition of tariffs against Chinese imports will cause disproportionate economic harm to U.S. services providers and consumers.

CSI is the leading industry association devoted exclusively to helping America's services businesses, increasingly digitally enabled services, and workers compete in world markets. CSI member companies represent a broad spectrum of the U.S. services sector, including distribution services, express delivery, financial services, media and entertainment, telecommunications, information and communications technology (ICT) services, and professional services. These services are critical enablers of U.S. economic growth.

To understand the impact of the proposed \$200 billion additional tariffs on the U.S. economy it is essential to examine the impact those tariffs may have on services. The services sector is the bedrock of the U.S. economy. Services account for about 75 percent of U.S. private sector jobs, \$730.6 billion in U.S. exports, and nearly 80 percent of U.S. gross domestic product (GDP). Services, including digitally enabled services, are a part of and enable manufacturing, agriculture as well as nearly all other sectors of the U.S. economy. Services are also a key part of supply chains. Moreover, ICT services drive U.S. productivity overall. Services allow all businesses to be more productive, reach more customers in more foreign markets, and ultimately, support a better livelihood through higher wages and greater opportunities.

## **U.S.-China Services Trade Relationship**

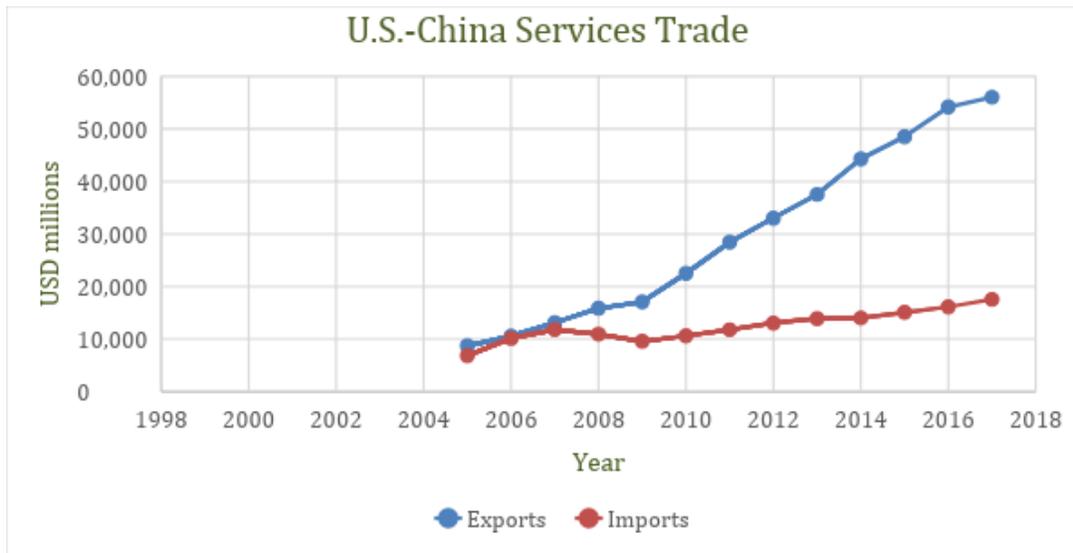
China was the second largest services export market for U.S. services providers in 2017, with \$56 billion in U.S. services exports, and a \$38 billion services trade surplus.<sup>1</sup> From 1999 to 2007, the United States maintained a services trade surplus with China of around \$1 billion. Since then, U.S. services exports have more than quadrupled, resulting in the growth of the U.S. services trade surplus with China from \$1.3 billion in 2007 to \$38 billion in 2017.<sup>2</sup> The growth in U.S. services exports to China and our bilateral services trade surplus exceeds the growth in U.S.

---

<sup>1</sup> "Table 3.2. U.S. International Trade in Services by Area and Country, Seasonally Adjusted Detail, China," Bureau of Economic Analysis, U.S. Department of Commerce, March 21, 2017, <https://www.bea.gov/itable/>.

<sup>2</sup> Ibid.

services exports to other nations (54 percent) as well as the increase in the global U.S. services trade surplus (which has risen by 115 percent).<sup>3</sup> China has thus become one of the fastest growing markets for U.S. services.



Despite this growth and China’s insistence that it is an open market with clear rules, widespread barriers continue to impede U.S. services providers’ operations in the market. This includes existing and proposed discriminatory regulations, licensing and investment restrictions in areas such as data flows, information technologies, cloud computing, telecommunications. While U.S. services suppliers have been able to generate a trade surplus despite these trade barriers, this surplus and the overall level of U.S. services trade and investment with China could be far greater if these barriers were removed.

It is essential that the positive contribution that U.S. services China trade and investment makes to the U.S. economy not be put at risk. We note that even without the imposition of the additional \$200 billion in tariffs on Chinese imports U.S. services providers are beginning to experience discreet, adverse actions by China in response to existing and threatened U.S. tariffs.

The steps that the United States takes today on these tariff lines will determine whether America continues to lead the global market in fields like telecommunications, cloud technology, and internet-connected devices or begin to fall behind their foreign competitors. CSI members build the key infrastructure that underlies U.S. cloud and other technologies and services. This includes data centers in numerous states, and other investments in next-generation cloud infrastructure, generating thousands of jobs and billions in revenue for U.S. companies. Consumer devices including voice assistants, Bluetooth/smart speakers, IOT devices, smartwatches, digital media devices, set-top boxes, headphones, fitness trackers, and many other upcoming devices also generate thousands of jobs and billions in revenue for U.S. companies. U.S. leadership in these high-tech industries is critically dependent on access to goods covered

---

<sup>3</sup> Ibid.

by the Harmonized Tariff Schedule (HTS) subheadings that USTR has proposed for 10 to 25 percent additional duties.

Increasing U.S. tariffs on Chinese imports is also adversely affecting U.S. services providers within global supply chains impacted by these tariffs. These complex supply chains can take years to establish, and they cannot be shifted to different countries or facilities without compromising contracts, compliance, quality and value for the consumer – not to mention the dominant role which the United States plays. A product marked as originating in China actually reflects manufacturing and other inputs from the United States and many other countries. U.S. services providers use these manufactured inputs to deliver their services, and increasing the costs of these inputs will negatively impact U.S. services providers who rely on those inputs to deliver (or export) their services back to China.

Some CSI members also buy significant amounts of autos, auto parts and auto repairs. Increases in these costs due to proposed tariffs on related product lines will negatively affect them and their customers.

For these reasons, we ask that the Administration remove the products listed below from the final list of products that will be subject to additional duties, and instead work with our association and members on alternative approaches to strengthen U.S. leadership on these critical issues.

**Comments on Specific Annex Tariff Subheadings**

CSI has highlighted 55 tariff subheadings covering products which U.S. services providers employ to deliver or facilitate the provision of their services to both consumers and businesses. CSI member companies report that for these 55 tariff subheadings they generally do not have approved, alternate U.S.-based sources for products that are also manufactured in China (or elsewhere). If they were able to identify a U.S.-based alternate source, approving the alternate source could first require several months of testing and field trials prior to introducing the product to customers on the market.

These products are significant inputs to suppliers who build cloud computing servers for data centers at facilities within the United States; items and inputs in items used for everyday household use and in connected home systems; items used for routers and building out network systems; and many others that are integral components (such as software) that are enabled by digital services and provided within the United States. Tariffs imposed on these products will raise suppliers’ costs, raise service providers’ costs, and raise costs to both American businesses and consumers that use their end products and services in both commercial and personal functions. This would negatively hit American employers, workers, and their homes. We therefore urge the Administration to remove these tariff subheadings from List 3.

HTSUS Subheading	Product Description
8473.30.11	Printed circuit assemblies, not incorporating a cathode ray tube, of the machines of 8471

HTS Tariff Subheading 8473.30.11 is a key product line for the Internet, consumer technology, streaming devices and data centers, and cloud infrastructure, covering most of the core inputs to data centers and other U.S. technical infrastructure, including memory modules and other printed circuit board assemblies (PCBAs). It is also a key product line for telecom network equipment and systems.

PCBAs are present within all computers, servers, and phones, as well as almost all electronic devices. Taxing these components would make it far more difficult to build and operate data centers and other technical facilities in the U.S. and would undermine severely U.S. leadership on cloud technologies. Taxing such components would also put U.S. market share in the rapidly growing cloud market at risk, kill off U.S. jobs, decrease economic growth (as data centers are key employers of highly skilled workers in the United States), and drive businesses to rely more on foreign cloud providers. The effect of tariffs on PCBAs would extend far beyond the tech sector, impacting nearly every sector that relies on cloud computing, including farming and manufacturing sectors. The proposed tariffs on these products that feed into data centers would ultimately make cloud services more expensive to deliver to consumers and lead to price increases. One recent study estimates that a 25 percent tariff on PCBAs would increase prices by more than 6 percent and reduce consumption by nearly 12 percent in 2019.<sup>4</sup>

CSI member companies that use these inputs to manufacture telecom equipment and data center infrastructure have noted there is typically no alternate sourcing available for these inputs. Although they seek to source products from multiple suppliers as often as possible, this equipment can be very complex and telecom suppliers often seek out ways to hinder interoperability with other suppliers' products. For these types of products, "drop in" replacements are rarely available. For the products they source that do have multiple approved suppliers, the companies have learned that in many cases each of these approved suppliers manufacture in similar locations (e.g., China). Therefore, they have identified very few cases where they would be able to shift substantial volume from a tariff-impacted supplier to a non-impacted supplier.

For this product line, there is not significant production taking place in the United States. CSI member companies have explored PCBA sourcing from U.S. providers but have not found sufficient capacity in the United States to meet their needs, outside of a few companies that primarily do small volume runs. Overall, U.S. government data indicates that about 68 percent of all HTS Tariff Subheading 8473.30.11 imports come from China, with a few other low-cost regions in Asia making up a majority of the remainder of this work.

CSI member companies note it could take up to a year to shift production from China to a new country, which includes the time it takes to qualify a factory and get a new assembly line up and running, run reliability classification and QA testing, set up new transportation routes, negotiate pricing, and address other logistics issues. These processes represent time lost to foreign competitors in the highly competitive and rapidly expanding market for cloud services.

---

<sup>4</sup>"Estimated Impacts of Proposed Tariffs on Imports from China – Printed Circuit Assemblies and Wireless Telecommunications Accessories," Trade Partnership Worldwide, LLC, August 16, 2018, <https://prod1.cta.tech/CTA/media/policyImages/Estimated-Impacts-of-Proposed-Tariffs-on-Imports-from-China -Printed-Circuit-Assemblies-and-Wireless-Telecommunications-Accessories.pdf>.

In addition, components covered by HTS Tariff Subheading 8473.30.11 are not part of China's Made in 2025 strategy. Printed circuit boards are located down the value chain and are heavily commoditized inputs (typically produced via automated processes on assembly lines) that U.S. firms rely upon to do final assembly and testing of servers in the United States. American firms provide the real value-add in terms of server assembly, and retain the valuable IP that comes with those advanced manufacturing processes. If the cost of importing PCBAs goes up by 10-25 percent, we are likely to see many of these U.S. manufacturers shift their facilities overseas, resulting in the loss of U.S. jobs and expertise.

Imposing 10-25 percent duties on these products would undermine U.S. market share in the rapidly growing cloud market. Commercial enterprises, start-ups, universities, and a wide range of other institutions across the globe are actively migrating to cloud computing to meet their information technology needs, and they are turning to U.S. cloud providers. The global cloud services market segment is expected to reach \$300 billion by 2020. Companies from China and other countries are poised to take over this market if U.S. companies falter. The steps that the United States takes today on cloud and data center issues will determine whether American companies will continue to be the leaders in this market.

**Data centers are key employers of highly skilled workers in the United States.** Increased duties would cause U.S. job loss and decrease economic growth, especially in struggling communities. The average data center adds \$32.5 million in economic activity to its local community each year. These data centers are located across the United States, in communities that have experienced economic turnarounds because of investment and follow-on effects from building data centers. Large data centers have recently opened -- or are expected to open soon -- in Reno, Nevada; West Des Moines and Waukee, Iowa; Pryor, Oklahoma; New Albany, and Ohio.<sup>5</sup> During construction, each data center adds \$9.9 million in revenue for state and local governments, while employing an average of 1,688 workers.

**Increased duties on U.S. data center inputs would drive U.S. businesses to rely more on foreign cloud providers.** Large and small U.S. businesses currently rely upon U.S. cloud providers and U.S.-built data centers to store and access mission-critical data and workloads. That could change rapidly if new tariffs throw a wrench into the supply chains that U.S. providers rely upon to build data centers.

**The impact of these duties will extend far beyond the tech sector.** Future U.S. economic growth in nearly every sector relies on internet innovations like cloud computing. And U.S. cloud providers are among the strongest American exporters, supporting tens of thousands of high-paying American jobs and making a strong contribution towards a positive balance of trade. Data centers in particular have been key drivers of economic transformation across the United States, making it possible for our farmers, manufacturers, and other traditional businesses to transform their operations for the future and expand their customer base. For example, farmers in Iowa and elsewhere are increasingly using smart devices and analytics software to virtualize their crops and ultimately increase their yields and efficiency. Cloud-based data centers store and

---

<sup>5</sup> "Largest North American and Global Data Center Projects of 2017," Site Selection Group, September 25, 2017, <https://info.siteselectiongroup.com/blog/largest-north-american-and-global-data-center-projects-of-2017>.

process this data. The growth of this industry depends upon the ability of U.S. tech firms to rapidly build U.S. data centers in new areas of the country with next-generation equipment, so that small and large businesses can experience lower latency and faster, higher-quality performance. For example, when a new data center comes online, nearby businesses can expect to see a 30-80 percent reduction in latency for applications served in that region.

**Sudden changes in costs through new tariffs would massively disrupt the construction of new data centers in the United States.** While the additional duties seem highly technical in nature, the reality is that they will make it more difficult for U.S. companies to design and build data centers. In this sector, every day matters. Data centers are massive, complex facilities with numerous purpose-built hardware components that need to come together at the right time, so that U.S. providers can build and operate data centers at the scale needed for the United States to lead the market. A data center typically consists of thousands of server machines connected to a local network. Each machine within a data center consists of a wide range of purpose-built hardware modules, including CPUs, RAM and memory modules, baseboard management controllers, network interface cards, boot firmware, flash and persistent storage, and other components. Optical transceivers, line cards, and other transmission devices enable interconnection between the thousands of machines within a given data center and between servers and telecommunications networks. Power distribution boards, battery packs, and rack monitoring units help keep U.S. data centers running at optimal conditions, while other equipment provides the skeleton of the data center, including racks and rack shelves, rack fillers, rectifiers, and server trays.

The know-how and the expertise that comes with using these inputs and assembling them into servers, networks, and data centers comes from U.S. workers. In order to build data centers and state-of-the-art hardware in the United States, U.S. manufacturers and tech companies typically source some of the commodity products that are used in the construction of servers – like printed circuit board assemblies and memory modules – from China.

Forcing U.S. data center providers to reconfigure their supply chains and stop sourcing certain inputs from China would result in severe economic harm to U.S. providers and jeopardize U.S. leadership in the cloud market. As highlighted above, shifting production facilities would take upwards of 9 months to a year, giving foreign competitors a massive unearned opportunity to undercut and out-innovate U.S. counterparts. Additionally, these tariffs would increase the risk that companies currently doing final assembly of servers and other cloud infrastructure in the United States would move those manufacturing facilities overseas to avoid the impact of tariffs. This would result in the loss of thousands of U.S. jobs as well as the loss of valuable expertise and know-how that comes from homegrown manufacturing, assembly, and testing of cloud infrastructure.

**Overall, if the Administration imposes 10-25 percent additional duties on HTS Tariff Subheading 8473.30.11, it will substantially increase costs for U.S. businesses that are using data centers to transform their businesses and become exporters.** It will help foreign competitors displace local tech champions. And it will incentivize data center growth outside the United States, driving the revenue and jobs associated with this \$300 billion market to other countries.

HTSUS Subheading	Product Description
8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing appa

HTS Tariff Subheading 8517.62.00 is the keystone tariff line for Internet connectivity, as the products covered by this tariff line enable devices and other machines to connect with one another. It is also a tariff line that affects 5G providers. For the thousands of servers in a data center to connect with each other, and for the data center to connect with the outside world, U.S. companies need to use optical transceivers, line cards, and other transmission devices.,

The data shows that about half of all U.S. imports under HTS Tariff Subheading 8517.62.00 come from China. It would be very difficult and time-consuming for most U.S. firms to switch their sourcing for goods in this category. If tariffs are imposed, a recent study shows that U.S. consumers will need to pay nearly \$3.2 billion more for these devices, a 22 percent cost increase for each device.

One CSI member company’s suppliers said that shifting their manufacturing to another country for this product line would take an estimated 12 months or more. The company may also wish to inspect new factories and/or validate product quality to ensure the integrity of the goods and services they offer to their customers, potentially extending the length of the transition period. In many cases, particularly with newer products, a supplier will not have space immediately available at non-Chinese locations, meaning that several additional months of waiting time will be added. In addition, some manufacturing partners will charge contractual penalties to U.S. firms for breaking obligations to build products in a given location. Finally, shifting to U.S. production would be even more difficult if U.S. manufacturers need to pay increased tariffs on some of the underlying parts of these devices, such as PCBAs and memory modules, which are covered by HTS 8473.3011.

The consumer impact of increased tariffs is direct because the proposed duties would apply to a massive range of internet-connected consumer devices largely developed by U.S. companies. Virtually every American household that accesses the Internet at home or uses consumer tech will be directly impacted and will pay higher costs if the Administration imposes 10-25 percent additional duties. First, a consumer needs a modem and a router to connect to the Internet. Second, a consumer uses a wide range of Internet-connected devices to manage tasks, watch videos, play games, monitor their health, etc.

Here are some examples of the types of products covered by HTS Tariff Subheading 8517.62.00 that consumers use to tap into the Internet, and that are potentially subject to 10-25 percent duties:

- Gateways
- Modems
- Routers
- Streaming devices for your TV

- E-readers
- Bluetooth and other smart speakers
- Wireless headphones
- Smart watches
- Fitness trackers

If tariffs are imposed on this category, a recent study shows that it will increase costs for U.S. consumers by nearly \$3.2 billion annually -- up to a 22% cost increase for each device.<sup>6</sup>

Increasing tariffs on this product line would also put a significant drag on U.S. companies – including many small businesses – trying to manufacture connected devices in the United States. The innovators in these consumer tech categories are primarily U.S. companies. The U.S. firms that make these products will become less competitive on a global basis as the additional duties give their foreign competitors a significant cost advantage over U.S. goods in key export markets.

The United States clearly has the opportunity to lead the world in the deployment of 5G, but this will require significant capital investment. According to a report by Deloitte (“5G: The Chance to Lead for a Decade”), other countries are outspending the United States in this area. The report finds that “since 2015, China outspent the United States by approximately \$24 billion in wireless communications infrastructure and built 350,000 new sites, while the United States build fewer than 30,000. Looking forward, China’s five- year economic plan specifies \$400 billion in 5G related investment.”<sup>7</sup>

USTR’s proposed 10-25% tariffs on Chinese imports will adversely impact the U.S. deployment of 5G. Most 5G suppliers use finished goods and components that are produced or subcontracted for in China. The proposed tariffs on HTS Tariff Subheading 8517.62.00 will have the most significant adverse impact on 5G and core network deployment. This Product Code is very broad and includes equipment such as routers, gateways, switches, line cards, etc.<sup>8</sup> Non-Chinese suppliers have an increasingly global supply chain, with many telecom equipment components and some finished products made in China.

While 5G suppliers are considering shifting production out of China, such actions will require at least 1 year, if not longer. In order to develop a new plant or modify an existing one, considerable time and effort is required. Moreover, companies looking at relocating are likely considering many of the same alternative countries, which will place additional strain on the 5G

---

<sup>6</sup> “Estimated Impacts of Proposed Tariffs on Imports from China – Printed Circuit Assemblies and Wireless Telecommunications Accessories,” Trade Partnership Worldwide, LLC, August 16, 2018, [https://prod1.cta.tech/CTA/media/policyImages/Estimated-Impacts-of-Proposed-Tariffs-on-Imports-from-China\\_-Printed-Circuit-Assemblies-and-Wireless-Telecommunications-Accessories.pdf](https://prod1.cta.tech/CTA/media/policyImages/Estimated-Impacts-of-Proposed-Tariffs-on-Imports-from-China_-Printed-Circuit-Assemblies-and-Wireless-Telecommunications-Accessories.pdf).

<sup>7</sup> See “5G: The chance to lead for a decade,” Deloitte, <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-5g-deployment-imperative.pdf>.

<sup>8</sup> See “Communication apparatus (excluding telephone sets or base stations); machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus,” [https://www.customs.gov.ng/Tariff/chapters/Chapter\\_85.pdf](https://www.customs.gov.ng/Tariff/chapters/Chapter_85.pdf).

supply chain. Rather than deferring the proposed tariffs on HTS Tariff Subheading 8517.62.00, we recommend excluding them altogether from the Section 301 tariffs in order to avoid unintended adverse consequences negatively impacting the deployment of 5G and core network deployment in the United States.

HTSUS Subheading	Product Description
4202.19.00	Trunks, suitcases, vanity cases, attache cases, occupational luggage & like containers surface of vulcanized fiber or paperboard nesoi
8414.59.15	Fans used for cooling microprocessor, telecommunications equipment, or computers
8414.90.10	Parts of fans (including blowers) and ventilating or recycling hoods
8471.50.01	Processing units other than those of subheading 8471.41 and 8471.49, nesoi
8471.60.10	Combined input/output units for automatic data processing machines not entered with the rest of a system
8471.60.70	Input or output units suitable for physical incorporation into ADP machine or unit thereof, nesoi, not entered with the rest of a machine
8471.60.90	Other input or output units of digital ADP machines, nesoi, not entered with the rest of a system
8471.70.10	ADP magnetic disk drive storage units, disk dia, ov 21 cm,w/o read-write unit; read-write units; all not entered with the rest of a system
8471.70.20	ADP magnetic disk drive storage units, disk dia. ov 21 cm: for incorp. into ADP machines or units, not entered with the rest of a system
8471.70.50	ADP magnetic disk drive storage units, disk dia. n/ov 21 cm, nesoi, not entered with the rest of a system
8471.80.10	Control or adapter units for automatic data processing machines not entered with rest of a system
8471.80.40	Unit suitable for physical incorporation into automatic data processing machine or unit thereof, no entered with rest of a machine, nesoi
8471.80.90	Other units of automatic data processing machines, not entered with the rest of a system, nesoi
8471.90.00	Magnetic or optical readers, nesoi; machines for transcribing data on data media in coded form and machines for processing such data, nesoi

8473.30.51	Parts and accessories of the ADP machines of heading 8471, not incorporating a CRT, nesoi
8473.30.91	Parts and accessories of the ADP machines of heading 8471, incorporating a CRT, nesoi
8504.40.60	Power supplies suitable for physical incorporation into automatic data processing machines or units thereof of heading 8471
8504.40.70	Power supplies for automatic data processing machines or units thereof of heading 8471, nesoi
8504.40.85	Static converters (for example, rectifiers) for telecommunication apparatus
8504.40.95	Static converters (for example, rectifiers), nesoi
8504.90.20	Printed circuit assemblies of power supplies for automatic data processing machines or units thereof of heading 8471
8517.69.00	Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network
8518.40.10	Audio-frequency electric amplifiers for use as repeaters in line telephony
8518.40.20	Audio-frequency electric amplifiers, other than for use as repeaters in line telephony
8518.90.20	Printed circuit assemblies of line telephone handsets; parts of repeaters
8518.90.41	Other parts of telephone handsets other than printed circuit assemblies
8523.49.40	Recorded optical media for reproducing representations of instructions, data, sound, & image, recorded machine readable binary form, for ADP
8523.52.00	Semiconductor media, "smart cards"
8523.59.00	Semiconductor media, nesoi
8525.50.30	Transmission/reception apparatus for television
8528.72.04	Incomplete or unfinished color tv reception apparatus, presented w/o a display device, incorp. VCR or player
8529.10.21	Television antennas and antenna reflectors, and parts suitable for use therewith
8529.90.13	Printed circuit assemblies for television apparatus, nesoi
8529.90.75	Parts of printed circuit assemblies (including face plates and lock latches) for other apparatus of headings 8525 to 8528, nesoi

8531.90.90	Parts of electric sound or visual signaling apparatus, nesoi
8537.10.91	Other boards, panels, consoles, desks, cabinets, etc., equipped with apparatus for electric control, for a voltage not exceeding 1,000, nesoi
8543.70.91	Digital signal processing apparatus capable of connecting to a wired or wireless network for sound mixing
8543.90.88	Parts (other than printed circuit assemblies) of electric machines and apparatus, having individual functions, nesoi
8544.20.00	Insulated (including enameled or anodized) coaxial cable and other coaxial conductors
8544.42.10	Insulated electric conductors nesoi, used for telecommunications, for a voltage not exceeding 1,000 V, fitted with connectors
8544.42.20	Insulated electric conductors nesoi, used for telecommunications, for a voltage not exceeding 1,000 V, fitted with connectors
8544.42.90	Insulated electric conductors nesoi, for a voltage not exceeding 1,000 V, fitted with connectors, nesoi

The HTS tariff subheadings beginning with 8414.59.15 and ending with 8544.42.90 listed above are inputs for telecom network equipment/systems or are accessories for computing devices that CSI member companies employ to deliver or facilitate the provision of their services to both consumers and businesses. Increased product prices due to tariffs may reduce the quantity of products that CSI member companies purchase due to budget constraints, subsequently reducing the rate at which they deploy 5G services and improve the speed and coverage capabilities of our network. Reduced purchase volumes may also hinder their ability to replace legacy services with new, high-speed fiber services to both our consumer and business customers. Lastly, increased product prices due to tariff impacts may require CSI member companies to consider raising pricing for certain services, particularly in highly competitive business segments where margins are already thin.

The HTS Tariff Subheadings 4202.19.00, 8471.60.10, and 8471.80.10 are augmented reality and virtual reality (AR/VR) products, components and accessories. The imposition of a 10-25% additional duty on these products would significantly impact the profitability of the innovative U.S. companies who develop and sell them, stifling their growth and undermining their ability to invest and innovate to drive the industry forward and grow U.S. market share. Industries across the United States are just beginning to adopt AR/VR products for use in advanced research, worker training, healthcare, commerce, communications and many other high-value economic and social uses. If duties are imposed on U.S. companies' products, competitors in Asia and the EU would gain a significant competitive advantage in the U.S. market that they would use to wrest industry leadership from the United States.

The duties would also have a significant negative impact on the highly-skilled U.S. workers who are employed in this nascent U.S. industry. It is a sensitive time for the industry as consumers

decide whether to adopt this emerging technology. The duties would significantly raise the costs of AR/VR products, frustrating U.S. industry’s efforts to encourage adoption by reducing prices, and hurt sales. The resulting lower installed hardware base would discourage independent app developers and software designers from creating new content for the products of U.S. AR/VR companies, making it harder to compete against Asian and European products with higher sales levels and exacerbating the harm from the duties themselves.

It is not realistic for the U.S. AR/VR companies to source their products from the United States or from third countries outside of China, as the necessary production facilities do not currently exist. It would take a minimum 1-2 years to establish such operations, and it would cost significant amounts of capital that U.S. companies could otherwise invest in research and development and creating additional U.S. jobs. In addition, given the cutting-edge and rapidly changing nature of AR/VR products, the resultant delay in bringing new U.S. products to the market would be extremely harmful for U.S. competitiveness. This harm, in turn, would benefit Chinese AR/VR companies, contrary to the goals of the Section 301 investigation.

HTSUS Subheading	Product Description
3706.10.30	Sound recordings on motion-picture film of a width of 35 mm or more, suitable for use with motion-picture exhibits
3706.10.60	Motion-picture film of a width of 35 mm or more, exposed and developed, whether or not incorporating sound track, nesoi
3706.90.00	Motion-picture film, exposed and developed, less than 35 mm wide

HTS Tariff Subheadings 3706.10.30, 3706.10.60, and 3706.90.00 are related to recorded movies on film. They should be removed because their inclusion would not be an effective means to obtain the elimination of the acts, policies, or practices identified in USTR’s Section 301 determination. Further, their inclusion is counter to longstanding U.S. policy and could have significant negative long-term consequences to the United States.

First, the products do not resemble any of the technologies targeted in China’s “Made in China: 2025” plan. The time-worn analog film covered by these tariff lines is a 20<sup>th</sup> century “technology” on its way to obsolescence.

Second, these items have little or no trade. Total imports of all three HTS lines from China was practically zero in 2017 and therefore their inclusion would not serve the Administration’s objective of reducing the trade deficit with China or enhancing its leverage. Further, there is little chance of using these tariff lines as a basis of “evasion” of other lines – film that has been exposed and developed cannot simply be re-used or re-purposed.

Especially when, as here, there is no plausible benefit to U.S. goals, it would be affirmatively harmful for the United States to set a precedent counter to its longstanding policy.

HTSUS Subheading	Product Description
4202.92.91	Bags, cases and similar containers with outer surface of textile materials of MMF except jewelry boxes
4819.10.00	Cartons, boxes and cases of corrugated paper or paperboard
4823.90.86	Articles of paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibers, nesoi
8415.82.01	Air conditioning machines incorporating a refrigerating unit, nesoi
8507.20.80	Lead-acid storage batteries other than of a kind used for starting piston engines or as the primary source of power for electric vehicles
8523.21.00	Cards incorporating a magnetic stripe), 8525.80.30 (Transmission apparatus for television, nesoi
8537.10.91	Other boards, panels, consoles, desks, cabinets, etc., equipped with apparatus for electric control, for a voltage not exceeding 1,000, nesoi
9403.90.80	Parts of furniture (o/ than seats or o/than 9402) nesoi

The HTS Tariff Subheadings beginning with 4202.92.91 and ending with 9403.90.80 listed above include accessories for computing devices that CSI member companies employ to deliver or facilitate the provision of their services to both consumers and businesses. Tariffs could directly make those products more expensive.

**A Path Forward**

To address the ongoing market access and treatment issues faced by U.S. services providers in the Chinese market, CSI supports efforts to constructively engage with China. Any approach designed to further U.S. interests ought to recognize that the Chinese market has much to offer for American companies and their employees, and that the U.S. services trade surplus is a clear target for reciprocity.

CSI and its members stand ready to work with USTR and the Administration in crafting a comprehensive and transparent approach to ensure that the full spectrum of barriers to U.S. services providers operating in China are addressed in a manner that demands systemic change from China and minimizes the real threat of reciprocal punitive measures. CSI believes that a carefully calibrated approach with robust input from industry will facilitate the most positive outcome. Close cooperation with our international partners is also an essential element for success.