Overview
The Information Technology Industry Council (ITI) welcomes the opportunity to comment on the proposed tariffs on Chinese products issued in USTR-2018-0026.

ITI appreciates the administration’s focus on China’s unfair trade practices; however, the continued escalation of tariffs, including the recently proposed 25 percent tariffs on $200 billion worth of Chinese goods, accelerates harm to all American consumers, workers, and businesses - both large and small - with no end in sight. In this submission, ITI will highlight the harmful impact of the United States Trade Representative’s (USTR) proposed List 3 tariffs on American consumers, businesses, and supply chains. While ITI addresses several product lines in our comments, we do not support the imposition of tariffs on any of the proposed products, particularly as a method of resolving the issues identified through the Section 301 investigation.

Introduction
ITI represents 67 of the world’s leading information and communications technology (ICT) companies. We are the global voice of the tech sector and the premier advocate and thought leader in the United States and around the world for the ICT industry. ITI’s membership comprises top innovation companies from all corners of the technology sector, including hardware, software, digital services, semiconductor, network equipment, and internet, as well as “technology-enabled” companies that rely on ICT to evolve their businesses. Trade is critical to ITI members, and China is always a subject of much concern and interest.

Since the launch of USTR’s August 2017 investigation into China’s unfair trade policies and practices, ITI has supported the administration’s efforts to address the market access barriers and technology transfer pressures that our member companies face in China. USTR’s Section 301 report provides a comprehensive illustration of the policies, laws, regulations, and strategies that impede fair competition in China and enable coercive practices towards non-Chinese companies. We fully acknowledge that the U.S.-China bilateral trade relationship needs to be rebalanced; however, tariffs are not a solution for the problems outlined in the Section 301 report. Tariffs are effectively a tax on consumers and businesses, creating a chain of negative consequences that ultimately have an adverse impact on American consumers, workers, businesses, and jobs.

Tariffs Are the Wrong Approach
Tariffs Stymie Employment and Curb Market Growth

Tariffs have proven to be counterproductive time and again across numerous administrations. Even the limited 2002 steel tariffs enacted by President Bush led to the estimated loss of 200,000 American jobs and loss of $4 billion in wages\(^1\). The 2009 tire tariffs, applied at different rates between 25 to 35 percent over three years under President Obama, cost American consumers over $1.1 billion.\(^2\) Notably, these tariffs were limited to certain targeted sectors and failed in both instances; 25 percent tariffs on $200 billion worth of imports is unprecedented and would cause adverse effects on an unforeseen scale. The imposition of 25 percent tariffs on the 818 products in List 1 and the 279 items in List 2 of the Section 301 trade action have disrupted the otherwise steady growth of U.S. jobs and the U.S. economy that we have observed so far under this administration. With tariffs already driving up prices and the threat of more tariffs creating new anxieties in the market, many factories and small business owners have had to significantly downsize or shutter their operations and have let go of hundreds of workers across the country.\(^3\)\(^4\) While their full impact has yet to be realized, the July 6 imposition of tariffs and the planned August 23 implementation create significant market uncertainty that unnecessarily jeopardizes U.S. growth.

It is also important to note that one central focus of the 301 investigation has been China’s intellectual property (IP) theft, but the proposed tariffs disadvantage U.S. companies that already engage in best practices to protect their IP in China. Raising costs for U.S. companies to do business runs counter to U.S. objectives, especially given that some U.S. companies manufacturing in China often do so through wholly foreign-owned enterprises (WFOEs), which operate with a high standard for IP protection. These companies are also principally developing the core IP of products, as well as conducting all of their design and engineering, in the U.S. Companies maintain design in secure, high-standards environments and rely on the global supply chain for inputs to make production – and the export of U.S. products – cost-effective.

Tariffs Create a Negative Chain Reaction

*Consumer Products*

While the administration has claimed it has taken steps to avoid placing tariffs on consumer products, there is simply no way to protect consumers from tariffs on $200 billion worth of goods. The imposition of 25 percent additional duties on List 3 products would only cause

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additional harm to U.S. consumers, cost U.S. jobs, and undermine U.S. technology companies in the fight for global leadership. Among other items, List 3 specifically affects the below final consumer tech-enabled products.

- Household refrigerators (HS 8418.29.10, 8418.29.20)
- Window or wall-mounted air conditioning units (HS 8415.10.30, 8415.10.60, 8415.10.90)
- Electrical calculators (HS 8470.10.00, 8470.21.00)
- Digital processing units (HS 8471.50.01)
- Augmented and virtual reality ("AR/VR") headsets, consoles, controllers and accessories (8471.80.100, 8471.60.1050, 8471.60.90, 4202.19.00)
- Machines for the reception, conversion and transmission or regeneration of voice, images or other data ("transmission devices") (HS 8517.62.00)
- Television cameras (HS 8525.80.30)
- LCD devices (e.g., panels) and optical instruments (HS 9013.80.90)

"Transmission devices" (HS 8517.62.00) is a particularly broad term that captures all smart or interconnected devices that respond to or reproduce any voice or image data. This means that all telecommunications equipment relies on gateways, modems, and routers, which are the primary devices that enable internet connectivity among households and businesses alike, many of which are included on List 3.

List 3 tariffs would also increase the price of everyday consumer electronics, as the list covers streaming devices for televisions, e-readers, wireless headphones, and Bluetooth and other smart speakers. Moreover, tariffs on this broad category would raise prices of many internet of Things (IoT) devices, such as refrigerators and other modern household appliances that now connect to the internet. IoT devices process audio and visual data to trigger responsiveness, a key element of their benefit and convenience. Some of the most concrete examples available on the market are connected wearables such as smart watches and fitness trackers. AR/VR devices and accessories (HS 8471.80.10, 8471.60.10, 8471.60.90, 4202.19.00) are included in List 3 and are another new and developing technology with great potential not only for consumer entertainment, but also for education, communications, and infrastructure.5

Levying tariffs on these products would harm U.S. businesses and consumers, but they also have other long-term implications in stymying U.S. leadership and innovation related to this emerging technology. The aforementioned ICT tariff lines will make IoT and AR/VR technology more expensive, decreasing revenues from consumption and leaving less money for companies

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to invest back into research and development. This would ultimately hamper the growth and adoption of this technology and limit its benefits.

Digital processing units (HS 8471.50.01) can include standalone desktop towers, thin client terminals, and some standalone servers. These are all finished computing devices that are used widely in the workplace. Lists 1 and 2 already placed duties on various types of computer monitors and screens, and List 3 would further levy tariffs on other LCD screens and panels (HS 9013.80.90). Should List 3 tariffs be implemented, nearly all regular office computing equipment will have become more expensive, from towers to monitors, printers, scanners, and more.

Components
List 3 also targets a massive number of components, which ultimately would affect final consumer products as well as industrial inputs and technological infrastructure, including:

- Metal brackets (HS 7326.90.86, 7616.99.51)
- Base metal fittings (HS 8302.49.80)
- Fan units (8414.59.15)
- Parts of automatic data processing (ADP) machines (HS 8471.60.10, 8471.60.90, 8471.70.50, 8471.80.10, 8473.30.51)
- Printed circuit board assemblies (HS 8473.30.11)
- Power supply, connector, and distribution units (HS 8504.40.85, 8536.69.80, 8537.10.91)
- Machines for the reception, conversion and transmission or regeneration of voice, images or other data (“Transmission devices”) (HS 8517.62.00)
- Amplifier units (HS 8517.69.00)
- Overvoltage protection (HS 8531.9030)
- Printed circuits (HS 8534.00.00)
- Insulated electric conductors (HS 8544.20.00, 8544.42.90)
- Power and coaxial cables (HS 8544.20.00, 8544.42.90)

Printed circuits (HS 8534.00.00) and printed circuit board assemblies (HS 8473.30.11) support the basic infrastructure of the internet, as they retain and process data inside data centers and servers. Printed circuit board assemblies are also important components of consumer electronics, including, but not limited to: cell phones, flat-panel televisions, laptops/desktops computers, and home appliances (e.g., microwave ovens, dishwashers). These products integrate logic boards and dynamic random-access memory (DRAM) modules\(^6\) that allow

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\(^6\) DRAM is a type of memory that is typically used for data or program code that a computer processor needs to function. DRAM is a common type of random access memory (RAM) used in personal computers (PCs), workstations and servers.
electronics to process numerous functions simultaneously and access stored data more quickly. ADP machines refer to another broad swath of connected hardware that automatically acquires, stores, manipulates, or transfers data. Given that List 3 targets so many parts of ADP, the proposed tariffs will raise costs on components for all computing devices (e.g., laptops, desktops, servers). Therefore, as noted above, purchase of these products will likely fall and shrink revenues that companies could otherwise use to innovate.

**Impact on Community Services, Jobs, and Connectivity**

Tariff Lists 1 and 2 already target a number of products and inputs key to the provision of basic health, emergency, educational, and community services. List 3 has increased the likelihood that such basic community services would become more expensive, directly harming American citizens. Because of the broad nature of List 3’s proposed tariffs, there would inevitably be costs to the U.S. services sector, namely telecommunications and cloud services businesses. These services are used every day by healthcare providers, emergency responders, and communities across the nation to enable cost-effective and efficient operations that support numerous critical aspects of Americans’ lives, and have implications well beyond price increases at the checkout counter. Educational institutions, which are already beleaguered by budget restrictions and significant resource needs, would suffer from increased costs on computing hardware, software, and telecommunications services. Schools and libraries are looking increasingly to modernize their systems, acquire up-to-date hardware, and incorporate cloud technology into their operations to stimulate and facilitate learning and increase efficiency. Tariffs would make these improvements far less accessible when public school systems across the country are already struggling to meet operational costs.

Tariffs on transmission devices and printed circuit assemblies would directly increase the cost and resources required to build data centers in the United States. Yet, the consequences extend well beyond increasing the cost of construction. It would raise costs for both American small- and medium-sized businesses that rely upon these data and cloud services to run their day-to-day systems, such as payroll and order management. Furthermore, raising the cost of data centers and computer parts affects the use of operational and logistical technology for American businesses to export products and services to global customers. Data centers are also important to public-sector cloud services, which are used widely throughout public safety systems and among state and federal governments. With over three million data centers in the U.S. and the ever-growing expansion of the internet, the creation of data centers continues to be a source of U.S. growth across all fifty states. Increased duties would cost U.S. jobs in this growing sector and make digitally-enabled solutions less accessible.

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7 [https://mashable.com/2014/09/30/doe-energy-efficiency/#FKo.y0Hv4uqY](https://mashable.com/2014/09/30/doe-energy-efficiency/#FKo.y0Hv4uqY)
Households, businesses, farmers, and community service providers all rely on computing, telecommunications products, and the internet every day. Lists 1 and 2 have added costs to essential computing and telecommunications hardware like optical fiber cables, which allow for faster data transmission speeds for high-performance networking and greater bandwidth. List 3 proposes tariffs on coaxial cables (HS 8544.20.00), which physically connect the appropriate devices that enable internet connectivity. By placing tariffs on other telecommunications equipment as well as the equipment used to build data centers, List 3 would adversely affect all internet users with the unnecessary addition in hundreds of millions of dollars on costs for hardware and digital connectivity.

In addition to final consumer products, “transmission devices” (HS 8517.62.00) also covers radio base stations and switch units, which comprise the basic infrastructure used to connect wireless devices to wireless networks. Without these products, the 350 million plus wireless device users in the United States would not be able to make or receive calls, send or receive data, or send or receive video. Thus, tariffs on such a broad category of devices will also severely hamper U.S. leadership in 5G technology, which is driving the power and speed of deployment of next generation networks. Critical sectors of the global economy such as transportation, health care, and education are preparing to undergo a digital transformation via 5G to become increasingly connected and modernized. 5G technology will not only provide stronger and faster connectivity, but it is also critical to developing cutting-edge emerging technologies related to IoT, machine learning, and artificial intelligence (AI).

Trade policies that increase the cost of deploying networks will discourage rapid, ubiquitous deployment of 5G and put the U.S. at a disadvantage in the 5G and broader technological race. The imposition of duties on ICT products would likely affect the pace of American digitalization and technology-based innovation by essentially taxing 5G technology. While it is important for the U.S. to retain global leadership in 5G deployment, it is equally critical that 5G can be affordably and widely deployed to allow all sectors, as well as both rural and urban Americans to facilitate connectivity, efficiency, and business competitiveness. Given the potential benefits of 5G, governments across the globe are racing to deploy 5G networks, with the U.S. and China currently in the lead. By placing tariffs on related ICT products, the U.S. may inadvertently cede the race for 5G to China by obstructing deployment of the technology.

**Tariffs and the Global Supply Chain**

ITI understands that the administration drafted List 3 under the assumption that the products could be sourced from other countries or assembled in the United States. However, that assumption fails to account for the realities of the global marketplace. Companies distribute their operations globally in order to produce goods and deliver services cost effectively, which results in lower prices.
Global diversification of supply chains is also necessary for financial market and operational stability in the event of a geological crisis, such as a natural or man-made disaster. If one portion of the supply chain is adversely affected by a disaster, companies must be able to adapt where possible and source from alternative markets.

The notion that product component supply lines can be shifted overnight ignores the complexity and interconnectedness of the global supply chain. Such a notion also denies the fact that U.S. companies must sell products and services globally in order to remain competitive, while modern supply chains take this into consideration in an effort to maximize time-to-market advantages. Companies often spend months negotiating contracts with suppliers, analyzing their components and then deciding how to assemble and test products in the most cost-effective ways, customized for specific regions of the world. Terminating a relationship with a supplier and establishing a contract with another of equal quality (assuming one exists) typically results in significant costs associated with shifting capital and workers. In these situations, market share could be lost and never regained. Moreover, disrupting supply lines would in turn decrease U.S. exports of finished products if companies opt to shift products to a foreign country for final assembly and export in order to avoid a tax upon import into the United States.

The global supply chain not only affects the assembly of new products, but also repair and remanufacturing. As of 2012, the U.S. was the largest producer, consumer, and exporter of remanufactured goods – a key component of U.S. economic leadership. Remanufacturing all manner of goods supports the U.S. economy, creates American jobs, and benefits the environment. This is particularly necessary for small business owners who can reduce equipment costs, as well as for consumers who can purchase goods at lower prices. U.S. small- and medium-enterprises (SMEs) account for 36 percent of U.S. remanufacturing employment and 25 percent of U.S. production of remanufactured goods. A great deal of companies’ remanufacturing and repair occurs within the United States. Remanufacturing relies heavily on the shipment of parts around the world to be distributed for repair and remanufacture, parts that are often sourced from China such as ADP parts (HS 8473.30.51), insulators, and cables (HS 844.42.20, 8544.42.90). Equipment can also be shipped back to China for the purpose of remanufacture with readily available facilities in the country. The equipment can then be shipped back to the U.S. before being exported elsewhere. Just as the global supply chain for manufacturing new products is incredibly complex, so too is the remanufacturing supply chain. U.S. products are frequently shipped from China as one step in the remanufacturing process,

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8 [https://www.usitc.gov/publications/332/pub4356.pdf](https://www.usitc.gov/publications/332/pub4356.pdf)
9 [https://static1.squarespace.com/static/59544a94b8a79b397110a39a/t/5a7477140d9297e98a62ed6/151758215832/Accelerating+growth+of+the+US+remanufacturing+industry+_.+stakeholder+guide.pdf](https://static1.squarespace.com/static/59544a94b8a79b397110a39a/t/5a7477140d9297e98a62ed6/151758215832/Accelerating+growth+of+the+US+remanufacturing+industry+_.+stakeholder+guide.pdf)
even though these products are largely “American made” in their origins and innovative value. Routing these products to an economy other than China would only make otherwise cost-efficient practices more expensive and potentially reduce economic resilience and leadership in the long-term.

**The Impact of Retaliation & Government Protection**

China is clearly willing and able to respond with retaliatory tariffs, as it has demonstrated through tariffs on 545 U.S. products, targeting agriculture, manufacturing, and automobiles as a response to List 1 tariffs, with a second list of 114 items that including chemicals, oil and gas products, and medical devices as a response to List 2 tariffs. As of August 3, China has also prepared a list roughly equivalent to List 3 in scope that targets $60 million in U.S. exports at varying rates of 5, 10, 20, and 25 percent duties. Among the 5,200 products on this third list, China targeted not only American chemicals, metals, meats, and fabrics, but also included important ICT products such as semiconductors, sensors, and computing devices. While China imports fewer U.S. products and thus has fewer products upon which to apply tariffs, China can employ other regulatory and investment restrictions as a means of retaliating against U.S. action.

Given the Chinese government’s broad authorities and willingness to exercise industrial policy, China can also introduce other measures to subsidize losses, in addition to exercising policies to limit the market access or market participation of U.S. companies selling products and services in China. In effect, Chinese companies may bear some of the burden of tariffs in the short term and ultimately emerge unscathed in the long term as a result of China’s industrial policy supporting impacted sectors and manipulating the market. The same cannot be said of the United States, where the U.S. government cannot and should not wholly subsidize affected companies in the same manner that the Chinese government has signaled it will do. Even when U.S. government does choose to subsidize industries, it is not a sustainable long-term solution, nor can it adequately account for the loss of jobs, market share, and potential growth sacrificed through tariff imposition. The U.S. government also cannot effectively assist in renegotiating supplier contracts, making it difficult to impossible to mitigate the negative consequences of tariffs on consumers and business. Moreover, the breadth of the proposed $200 billion worth of tariffs spans across nearly every industry in the United States, making any moves to subsidize or assist affected sectors extremely difficult.

The rise in production costs and consumer prices alone will have a deep negative impact on the U.S. economy should List 3 be implemented. These are not short-term impacts, and the administration has yet to produce any metrics to indicate that this self-inflicted pain will yield longer term results. Before pursuing further duties on imports, we urge the administration to
carefully examine the effect of tariffs it has already implemented and measure how these actions have achieved the objectives of the 301 investigation.

Focus on Increasing Market Access and U.S. Competitiveness
ITI appreciates the U.S. government’s focus on market access challenges in China, such as USTR’s Section 301 investigation and subsequent report regarding China’s unfair trade policies and practices. The tools that the U.S. government uses to address these issues, however, must be tailored and strategic to avoid causing unnecessary harm to U.S. consumers, businesses, and the economy.

Jeopardizing America’s Technological Future and Competitiveness
The U.S. must invest in its own future as a means of maintaining its competitive edge. Serious investment in science and technology is also a proactive method to retain global U.S. leadership in ICT, enabling it to combat objectionable Chinese trade and cybersecurity practices. This means investing in research and development, education, science and technology, artificial intelligence (AI), and incentivizing innovation — all of which are key to future economic and societal prosperity. Making the technologies that support and enable this innovation more expensive via tariffs has the perverse impact of disadvantaging American workers, researchers, companies of all sizes, and students that the United States relies on to ensure that we remain technologically and economically competitive in the years to come.

The United States must be prepared to compete and maintain comparative advantages in out-innovating and outrunning China. Regardless of whether China plays by the rules or not, Chinese inventors, entrepreneurs, and businesses will continue innovating and will close the technological gap between the U.S. and China if the U.S. does not take the necessary proactive steps to stay ahead. While U.S. companies of course want a level playing field, the United States must also step up its game. China is making a concerted and strategic effort to invest and plan for its economic and technological future. The same cannot be said of the United States; in fact, U.S. federal research & development spending has dropped to an all-time low.\footnote{https://www.aip.org/fyi/2016/us-rd-spending-all-time-high-federal-share-reaches-record-low} According to the World Economic Forum, in 2016, China had 4.7 million recent STEM graduates while the United States had 568,000 graduates. In 2017, China accounted for 48 percent of the total global investment in AI startup funding, while the U.S. accounted for 38 percent. In monetary terms, China invested $7.3 billion in AI while the U.S. invested $5.77 billion.\footnote{https://www.technologyreview.com/the-download/610271/chinas-ai-startups-scored-more-funding-than-americas-last-year/}

China is on track to outpace the United States in a number of ICT-related areas. For example, according to a 2018 International Data Corporation (IDC) report, the U.S. will spend $22 billion...
on smart city development this year. China is close behind with projected spending at $21 billion. As of 2015, there were 1,000 smart city pilot plans in the works worldwide, 500 of which were located in China.

Made in China 2025 receives a great deal of attention for its ambitious outline of the Chinese government’s goals for industry; however, this plan should not be read as a mandate. China has developed and implemented numerous roadmaps for development of cutting-edge technologies over the years. These documents, while important windows into the objectives of the Chinese government, are aspirational in nature. The U.S. government should consider formulating its own strategy and objectives for U.S. competitiveness in the long-term, working closely with industry to identify areas of opportunity and research as well as the best ways to craft policies for the future. ITI and its members welcome the administration’s continued leadership on science and technology policy, particularly in strategic emerging technologies. We urge the Administration not to jeopardize continued U.S. leadership in the hope that tariffs will pay off. Placing 25 percent tariffs on U.S. companies depresses production, which will have several detrimental and second and third order effects on U.S. market competitiveness as well as R&D leadership. U.S. ICT companies are already the very companies competing against state-dominated efforts to carry out Made in China 2025. The implementation of tariffs makes it more difficult for U.S. ICT companies to remain a robust competitor.

Conclusion – Assess the Impact and Prospects for Success before Considering Implementation

Market access and technology transfer issues in the Chinese market are complex problems that require a strategic, nuanced, and long-term approach. USTR has appropriately identified the problems of greatest concern to the ICT sector and documented them comprehensively. While the administration’s threat of tariffs has achieved the first step of getting China’s attention, we have yet to see a change in China’s behavior or evidence of serious negotiations. Additionally, the administration continues to proclaim that tariffs will protect and benefit Americans. We urge the administration to study and publish statistics regarding the benefits and harms of tariffs implemented thus far prior to considering implementation of future tariffs.

Furthermore, we encourage the administration to pursue serious negotiations with the Chinese on concrete market access commitments with clear accountability mechanisms and timelines for implementation. Thank you for your consideration of our views.