OPENING STATEMENT Ranking Member Daniel W. Lipinski (D-IL) of Subcommittee on Research and Technology

House Committee on Science, Space, and Technology Hearing Subcommittee on Oversight Subcommittee on Research and Technology Leveraging Blockchain Technology to Improve Supply Chain Management and Combat Counterfeit Goods May 8, 2018

Thank you, Chairman Abraham and Chairwoman Comstock, for holding this hearing on current and potential supply chain management applications for blockchain technology. And thank you to the witnesses for being here this morning to share your expertise with us as we continue to examine what types of challenges are most effectively addressed with blockchain technology.

Just this past February, this Committee held a hearing on emerging applications of blockchain technology. That hearing gave us a chance to better understand the promises, and limitations, of blockchain. As I and several of my colleagues noted then, the potential for blockchain technologies to provide more secure, reliable, transparent information makes it an attractive option in many sectors of the economy. Supply chain management is one sector that is embracing blockchain technologies; in many circumstances, efficiency, transparency, and security seem to be improving as a result.

As a Member of both the Science Committee and the Transportation Committee, I am interested in applications of blockchain for logistics management, which is the component of supply chain management focused on how to move raw materials, intermediate products, and finished goods from their origins to their destinations. Last week, several major car companies launched a blockchain research group for the automotive industry. I look forward to hearing from the witnesses about how the maritime, aviation, rail, and surface transportation sectors interface with blockchains for logistics and supply chain management.

The Federal government is supporting blockchain technology through research and development work at several agencies, including the National Institute of Standards and Technology – or NIST – and the National Science Foundation. NIST has played an important role in supporting the fundamental research and developing the standards for the underlying technologies that blockchain is built upon. In a recent publication, the agency highlighted several important research areas that are critical for blockchain's wide-scale deployment, including new cryptographic methods and common standards and protocols. Advances in these areas will help implement appropriate blockchain solutions across different sectors and for different purposes.

As we will hear today, the Department of Homeland Security's Science and Technology Directorate is supporting R&D to use blockchain to increase the security and reliability of the chain of custody for goods moving over our borders and across our oceans with our international trading partners. This is one of many critical ways in which this directorate keeps us safe and I want to take a moment to comment on its leadership. It is important that we have permanent leadership at the top levels of this office, yet the title of the head person has changed from "Acting Under Secretary for Science and Technology to "Senior Official Performing the Duties of the Under Secretary for Science and Technology." I am concerned that

this name change implies that a long-term appointee is not anticipated anytime soon, and I encourage the Administration to act swiftly on naming a permanent leader to this office.

Supporting emerging technologies, such as blockchain, that have the potential to make our economy more efficient, reliable, and safe is important. In addition to improving the efficiency and sustainability of businesses and governments, the blockchain industry is creating new companies and jobs around the country. According to Forbes, Chicago ranks fourth in the country for blockchain jobs; last year, the State of Illinois helped launch a blockchain incubator there to help launch and grow companies. This is an important trend and one that federal, state, and local governments should continue to support.

At the same time, we have to distinguish valid areas for blockchain technology's use from misguided or inappropriate deployments. For example, while blockchain may make sense for complex, global supply chains made up of many parties with little knowledge or trust of one another, it may offer fewer benefits to regionally concentrated manufacturing consortia consisting mainly of small producers. I look forward to hearing from our expert panel regarding how the supply chain management sector can appropriately apply blockchain technologies.

I want to thank the witnesses again for being here. I yield back.