## OPENING STATEMENT Ranking Member Donald S. Beyer Jr. (D-VA) of the Subcommittee on Oversight

House Committee on Science, Space, and Technology Subcommittee on Oversight Subcommittee on Research and Technology Beyond Bitcoin: Emerging Applications for Blockchain Technology February 14, 2018

Thank you Chairman Abraham and Chairwoman Comstock.

This is a fascinating topic and I am glad we are examining the issue of blockchain technology today. Entrepreneurs, innovators, big businesses and small enterprises, all seem to be scrambling to understand possible applications of blockchain-based technologies. As the hearing title, suggests, blockchain technology has moved *beyond* cryptocurrencies into areas as diverse as the supply chain industry, healthcare, the clean energy sector, legal field, financial markets, and possibly even our election infrastructure. Blockchains have the potential to offer better security, enhanced privacy, and transactional transparency.

Blockchain appears to be a potentially disruptive technology, and government regulatory and law enforcement agencies are starting to figure out the ramifications of new blockchain-based services and applications. These agencies have a difficult task ahead of them. As a nation, I believe we want to ensure these blockchain-based technologies are used appropriately and that government regulations are not disregarded or intentionally circumvented by their use. At the same time, however, we want to encourage innovation and broad-based applications of blockchain-based technology when and where appropriate and advantageous.

I am particularly interested in hearing what specific steps our witnesses believe the U.S. government, particularly our science-based agencies including the National Science Foundation, Departments of Energy and Homeland Security, and the National Institute for Standards and Technology, should be taking to foster innovation in this field and help to ensure that America is a hub for blockchain research, development and discovery.

Chairman Abraham, I believe the Science Committee can play an important oversight role in providing a public forum to address these and other emerging technology-related issues that have broad implications for our society, our economy and our homeland security. I'm glad to see us dig into an emerging technology in such a bipartisan manner today, and think there are some other topics it might benefit us to explore as a Committee as well, including:

- What are the ethical issues surrounding emerging artificial intelligence and mimicking software, and where must we draw limits and regulate such technology?
- What are the security consequences of deploying autonomous vehicles, drones and other similar technologies on our streets and in the air?

- What are the technical challenges, security concerns and ethical implications we face from a growing list of implantable medical devices and brain-computer interfaces?
- How can we, or should we, keep a closer eye on the deployment of commercially owned and operated biometric and other surveillance technologies both online, on the streets, and in retail stores across America?

I hope that you will consider having future hearings that examine the wide-range of new and emerging technologies that are likely to affect Americans in distinct and dramatic ways. I am optimistic that our examination of blockchain-based technologies and their potential applications and implications is just the first of similar hearings the Committee will hold down the road.

I look forward to hearing from all of our witnesses today. Thank you.

I yield back my time.