

Opening Statement of Chairman Bob Latta
Subcommittee on Digital Commerce and Consumer Protection
“Disrupter Series: Quantum Computing”
May 18, 2018

(As prepared for delivery)

Good Morning. Welcome to the Digital Commerce and Consumer Protection Subcommittee, and today’s Disrupter Series hearing examining quantum computing. We continue our Disrupter Series as we examine emerging technologies supporting U.S. innovation and jobs.

This morning we are discussing the revolutionary technology known as quantum computing. This involves harnessing the power of physics at its most basic level. Unlike the computers we are familiar with and use today, a quantum computer holds the potential to be faster and more powerful. This innovation is expected to change every industry and make problems that are impossible to solve today something that can be solved in a matter of days or weeks.

Efforts to develop a commercially available and practical quantum computer are being pursued around the world. Because of the tremendous costs involved in developing a suitable environment for a quantum computer to operate, many of these efforts involve government support. Both the European Union and China have pledged or already spent billions to develop a quantum computer.

In the United States, development of a quantum computer is proceeding at the academic, governmental and private sectors. In addition to larger and familiar technology companies, smaller start-ups are also leading efforts in this area. We are fortunate to have one of these start-ups, Ion-Q, to testify today.

Although a quantum computer holds tremendous potential to solve previously non-computable problems, there are skeptics who question whether it will be possible to ever develop such technology. We look forward to our witnesses giving us their thoughts on this question.

On the other hand, some fear the threat such a computer would pose to the traditional computing model. Especially when it comes to encryption and data security, some fear that a quantum computer would make it nearly impossible to keep future computers secure. Data security and consumer privacy are key

concerns of this Committee. We also look forward to our witnesses addressing this issue as well.

Quantum computers hold tremendous potential to help solve problems involving the discovery of new drugs, developing more efficient supply chains and logistics operations, searching massive volumes of data, and developing artificial intelligence. Whichever nation first develops a practical quantum computer will have a tremendous advantage over its foreign peers. We hope our witnesses will help us examine the state of the race to develop a quantum computer, and state how the U.S is doing.

This is obviously a very dense subject. We also understand there are several other areas under development leveraging the principle of quantum mechanics. Our goal today is simple: to develop a better understanding of the potential of quantum computers; the obstacles to developing this technology; and, what policymakers should be doing to remove barriers and help spur innovation, competition, and ensure a strong and prepared workforce for future jobs.

As we explore this topic today, I would like to again thank our witnesses for traveling to DC and sharing their expertise with us as we examine this complicated and revolutionary technology. Thank you.