Opening Statement of Chairman John Thune Senate Commerce, Science, and Transportation Committee Hearing "The Commercial Satellite Industry: What's Up and What's On the Horizon." Wednesday, October 25, 2017, 10:00 A.M.

Good morning. Welcome to today's hearing on the state of the commercial satellite industry and the promises of next-generation satellite technology to improve the lives of Americans. I believe we are at a critical moment in the development of satellite capability, and I am excited to hear from our panel of distinguished witnesses today.

Satellite services available today offer residential broadband at speeds substantially greater than those available just a few years ago—download speeds that meet the Federal Communications Commission's definition of "advanced telecommunications capability"—and in some cases without the strict data cap limits that had vexed users of satellite broadband in the past. Much of our television broadcast programming is delivered to broadcasters by satellite with extraordinary reliability, and millions of Americans receive their video service through direct broadcast satellite.

This summer, the FCC for the first time authorized access to the U.S. market to a provider using a proposed constellation of 720 satellites. OneWeb received approval to enter the U.S. market with an array of satellites to provide global, high-speed broadband, including in remote and hard-to-serve areas. For comparison, there are about 1000 satellites total in operation today. This new type of service would place satellites in a much lower orbit than many of the satellites currently in operation. Similarly, SpaceX seeks to bring its satellite expertise to bear with a proposal to deploy a constellation of *thousands* of satellites to provide high-speed broadband. If realized, these ambitious proposals could completely change consumer access to broadband in rural areas as well as cities across the country and around the world.

Satellite capability can also play a critical role in establishing communication after natural disasters, and has been used by the Red Cross and others as part of the effort to reconnect the residents of Puerto Rico after the devastation caused by Hurricane Maria, as well as those affected by hurricanes in Texas and Florida.

As with the wireless services this Committee has examined at numerous hearings, spectrum is critical to satellite services. As the value of spectrum has skyrocketed with America's increasing demand for broadband, spectrum that previously had little value for mobile broadband use now faces competing demands.

It is essential that any evaluation of these competing demands accurately consider the full range of spectrum uses and how best to deliver broadband and other services to the American people. The specifics of how to balance such demands in the public interest—things like allocating spectrum between services and between licensed and unlicensed use; setting appropriate interference levels between terrestrial and satellite uses; and determining the size, number, and

location of exclusion zones—are as important as they are complex. However, they are not the subject of today's hearing as the FCC is addressing those matters in the ongoing Spectrum Frontiers proceeding and elsewhere.

But it is important to set the broad parameters of this discussion. We must ensure that next-generation technologies rise or fall on their merits, including their efficiency in the use of spectrum, and ultimately their ability to meet the demands of American households for reliable, high-speed broadband.

Today we will have an opportunity to hear from some of the leaders and innovators in the field who are redefining satellite capability and who can explain what satellite services can offer to ongoing efforts to make broadband more available to all parts of the country and the world. Wireline service, fixed and mobile wireless service, and satellite service all have a role to play in connecting Americans to next-generation broadband service.

Understanding satellite capability and the potential of next-generation satellite deployments will help inform this Committee regarding the costs and benefits of spectrum allocations, spectrum sharing, and related technology-neutral policies, among other things. I am pleased that we have such a distinguished panel to address these matters today, and look forward to hearing their thoughts.