## Can Low Earth Orbiting Satellites Bridge the Digital Divide?

The following is a summary of a <u>video</u> BPC recorded with several experts about low Earth orbit satellites (LEOs) and their potential to bridge the digital divide.

LEOs offer notable advantages in bridging the internet access gap, but there are certain challenges associated with satellite internet deployment, especially in rural areas.

An expert highlighted the COVID-19 pandemic exacerbated the digital divide in the US, leaving millions of people, particularly vulnerable groups such as the elderly and low-income families in urban areas, without internet access. Another explained that LEOs have revolutionized satellite internet by providing lower latency due to their closer proximity to Earth compared to geostationary satellites, potentially significantly improving internet connectivity in rural areas. In response to this observation, some experts expressed concerns that topography, clear line of sight issues, and potential interference from space debris, can still pose hurdles in satellite broadband deployment. One expert highlighted the potential for competition and economies of scale to drive down the cost of LEO-based internet service, making it more affordable for consumers. Concerns remain regarding collisions, rights to operate at certain elevations, and negative impacts on astronomy due to the increasing number of satellites in the sky.

Experts discussed potential solutions to make LEO satellite broadband service more accessible and affordable in the last segment. One noted LEO satellites can be particularly helpful in hard-to-reach areas or areas with disjointed existing networks, bolstering connectivity for first responders and public safety purposes. Broadband affordability and equipment for consumers in low-income communities remain a key challenge. Collaboration and competition among satellite companies and other technologies are highlighted by an expert as important factors in maximizing the impact of LEO satellites in bridging the digital divide.