To whom it may concern:

I would like to file a comment on proceedings 17-199 regarding minimum speeds for home internet, and minimum speeds that define broadband mobile connection. Defining mobile broadband as 10/1 Mbps is too slow for my needs. I currently live in a rural area and my only choices for internet include DSL, mobile, or satellite. Cable is not an option; Comcast quoted me $66,000 to run poles and cables the 1.5 miles to my house. I use mobile internet from Verizon for my home internet.

I am also a Ph.D. mechanical engineer and routinely perform advanced mechanical simulations that generate large data files in the 1-4 gigabyte size range. One enabling technology that I routinely use is cloud computers for performing the calculations. Unfortunately, I must download the large datasets to my local machine for post-processing. My current download speeds of about 30 Mbps requires hours of download time to retrieve the files from the cloud to my local computer. Upload speeds of 2-3 Mbps mean it takes a longer to upload my large analysis files out to the cloud. This greatly slows my ability to investigate new designs and slows the pace of innovations for my company.

Additionally, as my service has a data cap, I usually exhaust my limits with the first week or two of the month. Then I am at the mercy of getting my data throttled down to tortoise-like speeds.

Having access to fast internet is not at ‘want’ for me, it is a business need, an enabling technology, and a driver of innovation. The proposal to define ‘broadband’ as 10/1 Mbps service will hurt engineers and other scientists like myself, and slow the pace of innovation in this country. Every day I must make trade-offs about my analysis solely based on my internet speed. The result is that my simulations have lower fidelity, or I examine fewer design trades, or simply accept sub-optimal designs because I cannot justify spending the extra time waiting for the data transfer.

Fast internet is a technology that drives progress and innovation in other sectors of the economy, exactly like electricity and telephone service have done in the past. Please define minimum speeds for wireless much higher than the proposed rule, and define it as having no data caps. Limits of 50/10 Mbps with large or no data caps could make wireless a substitute for wired internet.

Regards,

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