



The Daily Dish

Laying the Ground Work for 5G

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Eakinomics: Laying the Ground Work for 5G

This past Friday, the chairman of the Federal Communications Commission (FCC), Ajit Pai, announced draft rules for a [public auction of the so-called “C-Band” spectrum on December 8, 2020](#). AAF’s Jennifer Huddleston has a full [run-down](#) of the issue, but here are some highlights.

There is tremendous interest in 5G wireless, but the key ingredient is enough of the right kind of spectrum. Recall that the 180 megahertz (MHz) of spectrum between 3.7 gigahertz (GHz) and 4.2 GHz – the C-Band – is attractive because lower frequency bands are best for broad coverage and can penetrate buildings. With most of the low-band space (below 1 GHz) already in use, people are very interested in the C-Band. In addition, the C-Band is one of largest contiguous bands of spectrum and its current users (satellite distributors of video programming) no longer need the entire band.

But a speedy auction is important. Having the backbone in place quickly will be important for increasingly connected emerging technologies such as various smart-home devices and autonomous vehicles.

By setting an auction by the end of the year, Chairman Pai and other commissioners recognize the need for a smooth and quick transition that will continue innovation in next-generation communications technology. As Huddleston puts it: “There are increasing concerns about what falling behind in 5G might mean for national security, particularly regarding China. A [recent coalition letter](#) pointed out ‘China has already pledged to make its C-band spectrum available for their wireless systems, giving them an alarming advantage in the development of the high-tech weaponry that is going to be essential to national defense in the coming years.’”

The FCC announcement coincides with the President’s FY2021 Budget, that included increased funding for both the FCC and the Department of Commerce for the purpose of spectrum management. The administration has placed a priority on next-generation communications technologies such 5G, and the need to encourage proper incentives for their development.