The 2.5 GHz Band

Prime Spectrum for Next-Generation Mobile Broadband

The 2.5 GHz band is the largest band of contiguous spectrum below 3 gigahertz – and its technical characteristics make this spectrum band highly suitable for nextgeneration mobile broadband services, including 5G. ***But much of the 2.5 GHz band lies fallow and unused throughout the United States.***

For over fifty years, the FCC has intended the 2.5 GHz band to primarily serve an educational purpose by placing certain restrictions on licenses in this band.

> ***What is now called the "Educational Broadband Service" (EBS) started as "Instructional Television Fixed Service" aimed for non-commercial educational providers in the early 1960s.*** It didn't take off, and so over the years, the FCC tweaked the service rules to promote more efficient use of this spectrum while still trying to maintain an educational component to its use.
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> In the mid-2000s, the FCC renamed it the "Educational Broadband Service" (EBS) and modified its rules to allow non-commercial educational entities to lease up to 95% of their spectrum capacity to commercial broadband providers. As a result, the FCC estimates that ***over 90% of EBS licenses today are leased to commercial providers by non-commercial educational entity license holders.***
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> > ***The technical characteristics make EBS spectrum in the 2.5 GHz band desirable for next-generation mobile broadband services, including 5G.*** One nation-wide service provider estimates that over 50% of its mobile LTE traffic flows through the 2.5 GHz band.

Still, significant portions of EBS spectrum in the 2.5 GHz band lie fallow and unused over more than half of the United States, mostly in rural areas west of the Mississippi River.

> The FCC has not granted any new access to the 114 MHz of EBS spectrum in over twenty years, and the existing restrictions continue to hobble this band's potential.

Earlier this year, the FCC started the process for updating the licensing framework in order to stimulate use of EBS spectrum in the 2.5 GHz band.

> The FCC process consists of two key changes. First, ***the FCC is proposing to eliminate the existing restrictions that hobble efficient use of EBS spectrum.***
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> > To do this, the FCC proposes to expand the geographic areas of the EBS licenses and also allow "flexible use" of the spectrum – meaning that licensees will no longer be restricted to non-commercial educational entities. These changes will make the EBS spectrum more useful and desirable for providing next-general mobile broadband services.

And second, ***the FCC is proposing to open opportunities for the public to acquire new 2.5 GHz licenses that could be used in a flexible way.***

> > Using incentive auctions is one option the FCC is considering to assign new licenses. The FCC is also considering establishing "local priority filing windows" to allow certain types of applicants – existing licensees, Tribal Nations, and educational entities that currently do not hold EBS licenses – to acquire new EBS spectrum; the FCC would then use incentive auctions to distribute any remaining spectrum for commercial use.

The deadline for filing official comments and replies closed in early September 2018, and so the FCC is now reviewing the comments filed by hundreds of parties before making any final decision on how to spur use of EBS spectrum in the 2.5 GHz band.