

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Expanding the Economic and Innovation
Opportunities of Spectrum Through
Incentive Auctions

GN Docket No. 12-268

REPLY COMMENTS OF GOOGLE INC.

Google supports the Commission's proposal to allow unlicensed use of otherwise vacant spectrum in the 600 MHz band on a "share before use" basis until a new wireless licensee commences operations.¹ The proposed approach to defining "commencement of operations," moreover, reasonably limits the time periods and areas in which 600 MHz spectrum will sit idle, enabling efficient use of this valuable resource. Halting unlicensed usage of 600 MHz spectrum at times and places in which licensees are not actually operating or conducting site commissioning tests is a recipe for warehousing, a result antithetical to sound spectrum management.

Site activation and commissioning tests in a portion of a Partial Economic Area ("PEA") should not be deemed to constitute "commencement of service" for the entire PEA.² PEAs can be expansive. For instance, the entire state of Hawaii constitutes one PEA; Alaska

¹ See *Comment Sought on Defining Commencement of Operations in the 600 MHz Band*, Public Notice, 30 FCC Rcd. 3200 (2015).

² See CTIA Comments at 1, 7-9; AT&T Comments at 2-3, 9-10.

is divided into just four PEAs; and Montana is covered by only eight PEAs.³ The idea that testing or deployment of carrier equipment would occur across the entirety of such large and sparsely populated territories, all at once, is unrealistic. So, too, is the notion that low-power unlicensed devices operating dozens or hundreds of miles away from a wireless test location could interfere with the testing.

Thus, allowing commencement of site commissioning testing in a portion of a PEA to render the whole PEA off limits to unlicensed usage would cause usable spectrum to lie fallow for lengthy periods of time, for no good reason. The Commission should prohibit unlicensed use only in those areas where site activation and commissioning tests are occurring.

Initiation of site commissioning tests is a “clearly recognized demonstration of [a licensee’s] commitment to commence operations,” such that adopting this trigger “maximiz[es] regulatory clarity as well as spectral efficiency.”⁴ The argument that “site commissioning tests typically take place in the late stages of a deployment” is not a reason to adopt a different threshold.⁵ Prior to site commissioning tests, licensees use sophisticated desk tools for network planning. And, carriers engage in detailed on-site surveys to calibrate propagation models and measure signals. These activities are intermittent and do not span the entirety of a PEA. The site commissioning test stage, on

³ See *Wireless Telecommunications Bureau Provides Details of Partial Economic Areas*, Public Notice, 29 FCC Rcd. 6491, Attachment B (2014).

⁴ Microsoft Comments at 2.

⁵ CTIA Comments at 7.

the other hand, is “sufficiently relevant” and “sustained ... to qualify as a commencement of operations.”⁶

Finally, there is a ready mechanism to address licensed operators’ concerns about harmful interference before site commissioning tests. Licensees need only provide a TV white space database notice of their intent to conduct surveys in specific portions of the PEA. The notice should provide the date on which the licensee intends to engage in survey testing, the frequencies the licensee intends to use, the licensee’s call sign, and a description of the area in which the licensee will engage in surveys with a minimum of eight and a maximum of 120 coordinates.⁷ Unlicensed devices that query a TV white space database then will cease operating in the designated areas for the duration of the survey testing.

⁶ Microsoft Comments at 2.

⁷ *See Id.*

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The Commission should expeditiously proceed with this balanced approach to the benefit of new wireless licensees, other users of 600 MHz spectrum, and consumers.

Respectfully submitted,



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