

March 27, 2012

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: *Applications of Cellco Partnership d/b/a/ Verizon Wireless, SpectrumCo, LLC, and Cox TMI Wireless, LLC for Consent to Assign Wireless Licenses, WT Docket No. 12-4*

Dear Ms. Dortch:

On Friday, March 23, Louis Peraertz of Commissioner Clyburn's office spoke by phone with John Bergmayer of Public Knowledge (PK). PK explained that a reevaluation of the Commission's spectrum screen was necessary to fully evaluate the Verizon/SpectrumCo/Cox transactions. Such a reevaluation would take into account changing market conditions and more appropriately consider the different policy factors that weigh into determining whether a carrier has excessive spectrum holdings relative to its competition. Consumers benefit from vibrant wireless competition, but this requires more than two dominant carriers who offer broadly similar handsets, plans, and prices. A properly-calibrated spectrum screen can be an important tool to help the Commission maximize wireless competition and to counteract "efficiency" arguments that take into account the balance sheets of large carriers but not the effects on users. PK submits this letter to more fully set out its views.

The spectrum screen is neither a cap nor a safe harbor

To begin with, the spectrum screen is only one of the analytical tools in the FCC's toolbox. If, after a license transfer, the screen would be reached in a given market, this indicates that the Commission needs to take a closer look to ensure that the transfer serves the public interest. Because the screen does not exhaust the Commission's analysis, it may be the case that, after taking a closer look, the Commission decides to approve a transaction anyway due to countervailing factors that benefit the public interest. A necessary corollary is that if in a given market the screen is *not* reached, the Commission might still deny the transaction. The screen is not a cap but neither is it a safe harbor. A transaction might lead to spectrum holdings that fall below the screen and yet still present harms to the public interest that require it be blocked. Indeed, the Commission cannot approve a license transfer unless the applicants show that the transfer would positively *benefit* the public interest. The most that a failure to reach a screen could show is that one test among many for locating particular public interest harms is not met. Not only does it not show that all public interest harms are avoided, it says nothing about the public interest benefits of a transaction. In short, if a screen is not met, this has no bearing on whether a transaction should be approved, but if a screen is met, this indicates that a transaction deserves a closer look.

The spectrum screen should be reevaluated from time to time

Of course, the fact that the spectrum screen is not the final word in transaction analysis does not mean that the screen itself should go unrevised. Indeed, commenters in this proceeding have repeatedly pointed out the current screen's flaws-the most significant of which is that it

considers all spectrum as having equal value, as though “megahertz” were a fungible unit like barrels of oil.¹ This simplistic approach makes no sense today. Different frequencies of spectrum have different properties that make them better suited to different uses. For example, because of different propagation characteristics, spectrum below 1 GHz can support wireless broadband services at a much lower cost than spectrum above 1 GHz.

As an analytical tool and not a formal regulation the Commission does not need to embark on a separate proceeding to revise its screen, and can revisit the exact calibration of the screen in the course of reviewing a transaction. The remainder of this letter will suggest ways that the Commission should revise the screen for the purpose of making it a more accurate tool by which to evaluate the Verizon/SpectrumCo/Cox transaction. It analyzes the issue as a three-step process. Under the first step, the Commission decides what spectrum should be considered in the screen analysis to begin with. Under the second step, the Commission applies various weighing factors to ensure that some spectrum counts more toward the screen, and other spectrum counts less toward the screen, based on objective engineering and economic criteria. Under the final step, the Commission determines whether the screen is met by looking at spectrum holdings as a percentage of the available total and at spectrum concentration levels.

Certain bands of spectrum should not count toward the screen

First, the Commission should discard certain bands from consideration. Some spectrum is simply so marginal that it should not even count for the purpose of the screen—some smaller carriers have large holdings of spectrum that is of limited value for deploying wireless broadband service. The pending Petition for Reconsideration from the Public Interest Spectrum Coalition² concerns this issue, arguing that the Commission was wrong to count Broadband Radio Service (BRS) spectrum for the screen. The analysis submitted by T-Mobile also argues against counting some of the BRS for the screen,³ further arguing against including various other bands. Whether any given bit of spectrum should count for purposes of the screen is a complex issue that depends not only on the objective physical characteristics but also on the regulatory and interference environments. As a general matter, PK does not believe that any spectrum that is not “suitable and available” for such wireless broadband use in the “near term”⁴ should be considered for the purpose of the screen, and generally support T-Mobile’s approach as properly removing some inappropriate bands from the analysis.

The Commission must weigh spectrum appropriately

Second, for the spectrum that *does* count for the screen, the Commission must apply various weighting factors to ensure that different holdings are accurately valued. The effect of

¹ Among others, the different Petitions to Deny filed by Free Press, RCA, and T-Mobile (all filed February 21) ably make this point.

² Petition for Reconsideration of the Public Interest Spectrum Coalition, WT Docket No. 08-94 (filed Dec. 8, 2008).

³ Petition to Deny of T-Mobile, WT Docket No. 12-4 (filed Feb. 21, 2012).

⁴ If the Commission predicts that certain spectrum will become available but then it does not, it should remove that spectrum from further consideration for the screen until it is actually built out.

these factors is to make different amounts of spectrum holdings count for more or less depending on different factors. (For instance, 10 MHz of spectrum might count as 15 MHz towards the screen after a 1.5 weight factor, or as 5 MHz after a .5 weight factor.) In this letter PK does not suggest what the precise weight factors are that should be applied to the spectrum, as determining exactly what those are requires an extensive empirical economic and engineering analysis that is beyond its scope. Indeed, it is precisely the exact value to give the different weighting factors that the Commission should reevaluate from time to time. Rather, PK points out the various reasons why weight factors might be applied to begin with.

- **Utility for wireless broadband.** The Commission has One simple way to get closer to a proper weighting of spectrum for the screen would be to weigh spectrum below 1 GHz, which is more suitable for wireless broadband more highly, and to give less weight to spectrum above 2 GHz which is less suitable for this use. Determining exactly what weight or discount to apply to any given spectrum will require an analysis of the physical and regulatory facts that affect the ability of spectrum to be used for wireless broadband or the cost of building it out. Again, T-Mobile has provided a useful analysis that suggests using market valuations of spectrum licenses as a proxy by which to determine relative spectrum values and to apply different weight factors to account for these different values. This can be an important first step.
- **Existing spectrum holdings.** Large carriers may enjoy economies of scale that permit them to extract more “value per megahertz” than smaller carriers. Accordingly, spectrum they hold should be weighted more heavily.
- **Counteracting the foreclosure value.** A large carrier with dominant spectrum holdings may value new spectrum more than a smaller carrier, simply because a large carrier has more to lose from increased competition. Once it becomes realistic for a licensee to shut out the competition, it is reasonable to expect it to try to do so. Therefore, any new spectrum that would potentially be acquired by a carrier that already has a lot of spectrum should count more towards the screen, to counteract these effects.
- **Marketshare considerations.** Beyond pure spectrum holdings, the Commission should weigh spectrum that is held by carriers with large marketshare more heavily than spectrum that is held by smaller carriers. This would help encourage spectrum acquisitions by smaller carriers, which would enable them to catch up to their larger competitors. This more equal competition would directly lead to consumer benefit.
- **Warehousing penalty.** To encourage spectrum to be built out and to discourage spectrum warehousing, spectrum that a licensee holds but is not yet built out should be weighted more highly. Licensees that acquire spectrum but do not use it should be discouraged from acquiring any more.
- **Population weighting.** For markets (e.g., the national market) where different licenses cover different population centers, the FCC should give a heavier weight to spectrum holdings that reach more people. Such licenses are more valuable than similar licenses that cover more sparse areas.

This list of different weight factors is not intended to be exhaustive. From time to time, even on a per-transaction basis, the Commission should consider whether it is taking into account all the right elements and applying an appropriate weight factor.

The Commission should look to two factors to determine whether the screen is met

Three, once the Commission has determined the total amount of post-weighted spectrum, it should look to at least two numbers to determine whether the screen has been hit. First, if after a transaction any licensee holds more than a third of all available post-weighted spectrum in a market, it should consider the screen to be triggered. (The current screen currently uses a one-third threshold of *unweighted* spectrum.) Second, it should calculate a “Herfindahl-Hirschman Index for spectrum,” taking the sum of the squares of the “spectrum shares”—that is, the percentage of available spectrum held by each licensee. Mirroring the DoJ’s HHI test for horizontal mergers,⁵ the FCC should consider the screen to be met if the post-transaction HHI figure is greater than 1500 (the “moderate concentration” threshold for mergers).

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Although it is but one of the Commission’s analytical tools the spectrum screen can be very useful if appropriately calibrated. To date, however, the screen has not been updated to account for the current understanding of the differential value of different parts of spectrum, and the different factors that contribute to how a given licensee might value its current or any new spectrum. If the Commission updates its screen it can more properly evaluate the impact of the license transfers in this proceeding.

Respectfully submitted,
/s John Bergmayer
Senior Staff Attorney
PUBLIC KNOWLEDGE

⁵ DEPARTMENT OF JUSTICE AND FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES 19 (2010), *available at* <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>.