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November 9, 2018

Via ECFS

Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: Notice of *Ex Parte* Presentation
Applications of T-Mobile US, Inc. and Sprint Corporation for
Consent to Transfer Control of Licenses and Authorizations
WT Docket No. 18-197**

Dear Ms. Dortch:

Pursuant to Section 1.1206(b) of the Commission's rules, 47 C.F.R. Section 1.1206(b), notice is hereby provided of an oral and written ex parte presentation in the above-referenced proceeding. On November 7, 2018, John Schwartz, Chief Executive of Voqal; Katherine Messier, Director of Development, North American Catholic Educational Programming Foundation, Inc. ("NACEPF") and Executive Director of Mobile Beacon, a wholly-owned NACEPF subsidiary; Alan Hill, President of the J.A. Hill Group; and undersigned counsel (together the "Participants"), met with members of the FCC Transaction Team and the Wireless Bureau as identified in Attachment A, to discuss and answer questions regarding the deck that is Attachment B hereto.

In the course of the discussion the Participants reiterated that the 2.5GHz band is an appropriate product market as discussed in the "Petition to Deny the Above-Captioned Applications as Currently Proposed of Voqal" filed August 27, 2018 ("Petition to Deny"). The Participants also discussed the history and character of Educational Broadband Service (EBS) spectrum leasing and emphasized that any divestiture plan for 2.5 GHz spectrum, whether as proposed in the Petition to Deny and referenced in Attachment B hereto, or otherwise, must ensure that EBS licensees retain their existing level of access to a nationwide network. For example, some existing educational programs like WiFi on school buses or hotspot lending programs throughout a community depend on widespread, continuous coverage. If their EBS spectrum were to be divested to an operator with a much smaller coverage footprint, educational institutions and low-income families relying on this service could be negatively impacted.

After excusing Messrs. Schwartz and Hill, and Ms. Messier from the meeting, undersigned counsel referenced three confidential or highly confidential Sprint documents that

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supported the points made in the attached deck and in the oral discussions, regarding the importance of the 2.5GHz band to provide 5G service (document SPR-FCC-13902322-13902348); the market power that Sprint's monopsony status creates (document SPR-FCC-13900389 at 13900395); and the effect of combining Sprint's and T-Mobile's spectrum holdings as proposed in the merger (document SPR-FCC-13898895 at 13898898).

Please contact undersigned counsel should any question arise concerning this matter or if additional information is required.

Sincerely,

/s/ Mark Van Bergh

Mark Van Bergh

cc: FCC participants listed in Attachment A

ATTACHMENT A

David Lawrence

Kathy Harris

Charles Mathias

Joel Rabinovitz

Aleks Yankelevich

Aalok Mehta

Kirk Arner

Mathew Pearl

Jim Bird

Catherine Matraves (by phone)

Thuy Tran (by phone)

Ronald Repasi (by phone)

ATTACHMENT B

Sprint/T-Mobile Merger – 2.5 Spectrum Issues

Presentation to FCC

John Schwartz

Chief Executive, Voqal

November 7, 2018



Overview

- In addition to its present spectrum assets, T-Mobile seeks to acquire a dominant position in indispensable 2.5 GHz mid-band spectrum.
- This concentration will harm EBS lessors *and* broadband consumers because control of the 2.5 spectrum will, we believe, limit the ability of (i) lessors to obtain competitive rates and (ii) big and small carriers to acquire the “viable mid-band spectrum” they need to deploy 5G competitively (Joint Opposition of T-Mobile and Sprint at 54).
- The FCC should require that New T-Mobile divest a contiguous block of no less than one-third of the current Sprint 2.5 spectrum.

Characteristics and Purpose of 2.5

- The 2.5 band is divided into EBS (117.5 MHz) and BRS (76.5 MHz).
- EBS (Educational Broadband Service) is a spectrum band set aside for educational use by non-profits and governmental organizations.
- BRS (Broadband Radio Service) has been licensed to commercial entities for broadband use, overwhelmingly to Sprint.
- Originally, educational entities used 2.5 primarily to transmit video to school classrooms. Now, it is used almost entirely for broadband services.
- EBS license holders now lease much of their spectrum to commercial entities—overwhelmingly to Sprint—and depend on the royalties to fund their operations.
- In a currently active rulemaking, the FCC has proposed removing these restrictions, allowing commercial entities to acquire licenses to EBS spectrum directly.

2.5 is a “sweet spot” for 5G

- 2.5 propagates better than high-band spectrum and poses fewer engineering problems than low-band spectrum.
- There are wide, contiguous blocks of 2.5 spectrum available for 5G deployment.
- 2.5 and TDD are especially well-suited for massive MIMO.
- T-Mobile and Sprint say that there are no viable mid-band alternatives to 2.5 for 5G (Joint Opposition at 53).

Sprint Dominates Local 2.5 Markets

- Sprint claims to hold an average of 160 MHz of 2.5 spectrum (out of a possible 194) in the top 100 markets, which is an average of 82% of the available 2.5 band spectrum: a highly concentrated set of markets.
- For example, Sprint controls 100% of the allocated EBS and BRS channels in such Cellular Market Areas (CMAs) as: Chicago, Washington DC, Pittsburgh, Miami, Baltimore, Minneapolis-St. Paul, Denver, and Phoenix.

Sprint/T-Mobile Say 5G Needs 2.5...

- Sprint itself has said publicly that national 5G coverage with millimeter waves is impractical, whereas the 5G deployment described by Sprint and T-Mobile, which relies on 2.5, will reach “far more customers across a much larger geographic area than either Verizon or AT&T could plausibly muster using only millimeter wave spectrum” (Sprint/T-Mobile PIS at 102).
 - CEO Michael Combes: national coverage with millimeter waves will require “one million sites” (Voqal Petition to Deny at 6 & n. 16).
 - CSO Kevin Crull: “Sprint has a treasure trove of 2.5 GHz spectrum and it’s particularly good for 5G because it sits in the perfect balance of speed and capacity and propagation, or distance and coverage” (Voqal Petition to Deny at 4 n. 3).
- In fact, this is central to their whole argument: the merger will create procompetitive efficiencies by allowing the merged entity (“New T-Mobile”) to build a better 5G network than its rivals.
- For T-Mobile, “viable mid-band spectrum is the missing spectrum resource” (Joint Opposition at 54).

...And “There Are No Viable Near-Term Spectrum Alternatives Available”*

- Sprint and T-Mobile, in their FCC Joint Opposition, summarize and reject each possible mid-band alternative to 2.5 (Joint Opposition at 53-59).
- Sprint and T-Mobile write that “If the Commission wants a cutting-edge, nationwide, robust 5G mobile network deployed in the United States before in other countries, it should not rely on the speculative availability of other mid-band spectrum” (Joint Opposition at 58).
- Other Carriers also recognize its importance:
 - AT&T: EBS spectrum “has enormous potential value to the public today because it is highly suitable for terrestrial mobile wireless broadband services, especially next-generation 5G services” (Voqal Petition at 4).
 - Verizon: “mid-band spectrum [such as 2.5 spectrum] could fill the critical gap between the high-band and low-band spectrum that will continue to serve as the foundation for network coverage and eventually fold into the 5G network architecture” (Voqal Petition at 4).
- In fact, it is now impossible to acquire mid-band spectrum in the large, contiguous blocks best suited for 5G outside of the 2.5 spectrum.

* Joint Opposition at 53.

When Sprint Gained Control, Competition Diminished

- In the mid and late 2000s, Sprint and Clearwire competed for control of 2.5 spectrum.
- After Sprint and Clearwire combined their 2.5 spectrum holdings in 2008, the price of 2.5 spectrum dropped, and this occurred at a time when spectrum acquisition remained no less important.
- The only plausible explanation for the price drop is Sprint's post-2008 market power in 2.5.

Pathways to Investigation of Harm from Buyer Power in 2.5

- To better understand the deterioration of competitive conditions in the 2.5 band, we invite the Commission to compare 2.5 spectrum leasing agreements from both before and after control of the band was consolidated in 2008.
- Some 2.5 spectrum leasing agreements with government entities are publicly available.
- Most 2.5 spectrum leasing agreements with Sprint, Clearwire, and other commercial entities are non-public, but may be available to the authorities reviewing the proposed merger.

The 2014 Miami spectrum market

- As another concrete example, consider prices for EBS spectrum and AWS spectrum in Miami in 2014-15.
- Broward County entered a 30-year lease with Sprint in October 2014 for \$0.25/MHz/Pop NPV, “a hard-won and unusually favorable price for EBS” (Voqal Petition at 13).
- At roughly the same time (late 2014 and early 2015), AWS spectrum in the same geographic market went for *more than 12 times that much* (Voqal Petition at 14).
- The only plausible reason for this discrepancy is the difference between a non-competitive and competitive market.

Anticompetitive Harm to EBS From Merger

- The merger would cause the following merger-specific harms to EBS licensees and competition in the EBS band
 - New T-Mobile would have less incentive than Sprint to sell or share this spectrum, which everyone believes is vital for deploying 5G.
 - New T-Mobile would have greater ability to maintain market power to obtain supra-competitive price discounts.
 - Other carriers would be less likely to seek new EBS spectrum as it becomes available, limiting competition.
 - New T-Mobile would have greater financial resources than Sprint to acquire EBS white space expected to become available through the Commission's pending rulemaking.

Anticompetitive Harm to Wireless Carriers

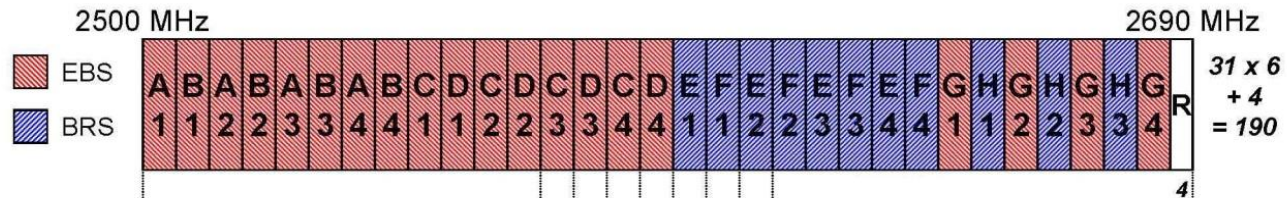
- The merger would cause New T-Mobile to materially exceed the Commission's spectrum screen in 65% of all U.S. counties (Voqal Petition at 17).
- New T-Mobile's stronger control of 2.5 would adversely affect its rivals' ability to deploy competitive 5G networks.
- In particular, it would hold almost all of the best mid-band spectrum (2.5) for developing 5G. Other carriers will have to settle for less efficient alternatives (or beg New T-Mobile for access to its 2.5 spectrum).
- In sum, it appears that New T-Mobile's national competitors (Verizon and AT&T) would be unable to deploy 5G as efficiently as New T-Mobile.

Potential 2.5 Divestitures

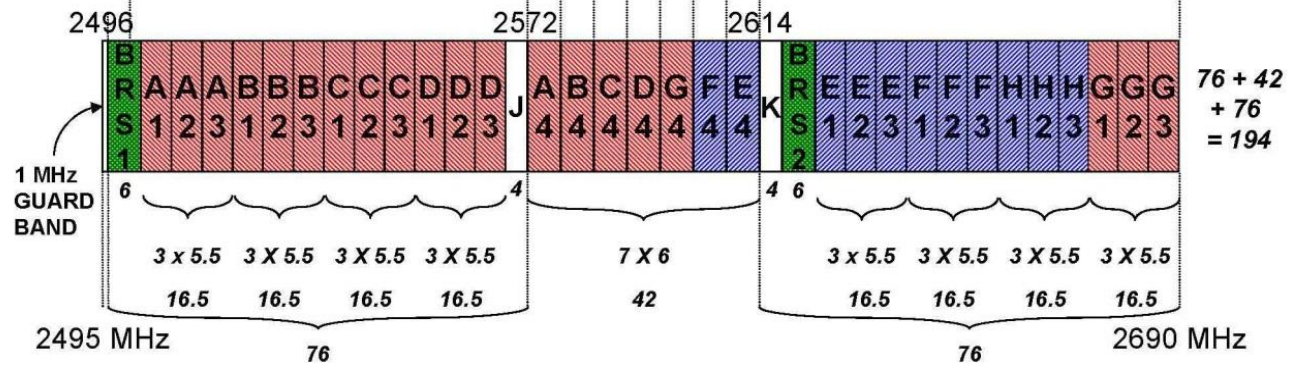
- Voqal has posited various divestiture options. Each option would generally require divestiture of at least one-third of Sprint's 2.5 spectrum in each CMA.
- We believe any divestiture remedy should ensure that:
 - there is nationwide 2.5 GHz availability for other wireless providers; and
 - existing EBS network access that provides services to educational users is not diminished.
- As Voqal noted in its Reply, it is open to other options. We urge the Commission to consider the issue carefully and weigh how best to accomplish divestiture that serves the needs of EBS licensees, is not unduly disruptive, and promotes the public interest in competition (Voqal Reply at 9).

BRS-EBS BAND PLANS: PRE-TRANSITION AT 2500–2690 MHz & POST-TRANSITION AT 2495–2690 MHz

PRE-TRANSITION



POST-TRANSITION



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Conclusion

- We will be happy to provide any additional information that we can.
- Thank you for taking the time to meet with us.